

SAMPLE COURSE OUTLINE

Course Code, Number, and Title:

DANA 4810: Predictive Analytics- Quantitative Data

Course Format:

[Course format may vary by instructor. The typical course format would be:]

Lecture 3 h + Seminar 0 h + Lab 1 h

Credits: 3

Transfer credit: For information, visit bctransferguide.ca

Predictive Analytics is a process of using and applying statistical analysis techniques for estimation and forecasting. Students learn standard methodology for analyzing quantitative data, including analysis of variance, design of experiments, simple regression, multiple regression, data transformation, and generalized linear models.

Registration in this course is restricted to students admitted to the Post-Degree Diploma in Data Analytics.

Prerequisite(s): A passing mark from Data Analytics Math Assessment Test or a passing grade in MATH 4801 and a minimum "C" grade in DANA 4800

Corequisites: None

Course Description, Prerequisites, Corequisites:

Predictive Analytics is a process of using and applying statistical analysis techniques for estimation and forecasting. Students learn standard methodology for analyzing quantitative data, including analysis of variance, design of experiments, simple regression, multiple regression, data transformation, and generalized linear models.

Registration in this course is restricted to students admitted to the Post-Degree Diploma in Data Analytics.

Prerequisite(s): A passing mark from Data Analytics Math Assessment Test or a passing grade in MATH 4801 and a minimum "C" grade in DANA 4800

Corequisites: None

Learning Outcomes:

Upon successful completion of this course, students will be able to:

- conduct one-way and two-way ANOVA and interpret the result, and check the underlying requirements
- select appropriate design of experiment for data analysis
- use the techniques of correlation, simple linear regression and multiple regression, and check the underlying assumptions of these methods
- select and conduct the appropriate data transformation techniques for dealing with non-normal response variables
- use the generalized linear model technique to develop statistical models when the response variable is not normally distributed and as a generalized approach to linear regression.
- use industry-leading statistical software applications to perform data analysis and to interpret the output.

Instructor(s): TBA

Office: TBA Phone: 604 323 XXXX Email: TBA

Office Hours: TBA

Textbook and Course Materials:

[Textbook selection may vary by instructor. An example of texts and course materials for this course might be:]

For textbook information, visit https://mycampusstore.langara.bc.ca/buy_courselisting.asp?selTerm=3|8

Note: This course may use an electronic (online) instructional resource that is located outside of Canada for mandatory graded class work. You may be required to enter personal information, such as your name and email address, to log in to this resource. This means that your personal information could be stored on servers located outside of Canada and may be accessed by U.S. authorities, subject to federal laws. Where possible, you may log in with an email pseudonym as long as you provide the pseudonym to me so I can identify you when reviewing your class work.

Assessments and Weighting:

Final Exam 35%

Other Assessments %

(An example of other assessments might be:) %

Midterm Exam: 30%

Assignments: 10%

Project: 25%

This generic outline is for planning purposes only.

Proportion of individual and group work:

Individual: 65%

Group: 35%

Grading System: Letter grade

Specific grading schemes will be detailed in each course section outline.

Passing grade: C

Topics Covered:

[Topics covered may vary by instructor. An example of topics covered might be:]

1. One-way and Two-way Analysis of Variance
2. Design of experiments
3. Simple regression
4. Multiple regression
5. Data transformation
6. Generalized linear models

As a student at Langara, you are responsible for familiarizing yourself and complying with the following policies:

College Policies:

[E1003 - Student Code of Conduct](#)

[F1004 - Code of Academic Conduct](#)

[E2008 - Academic Standing - Academic Probation and Academic Suspension](#)

[E2006 - Appeal of Final Grade](#)

[F1002 - Concerns about Instruction](#)

[E2011 - Withdrawal from Courses](#)

Departmental/Course Policies:

This generic outline is for planning purposes only.