#### **SAMPLE COURSE OUTLINE**

Creation date: November 30, 2020

Revision date:

#### Course Code, Number, and Title:

STAT 1124: Statistical Methods I

#### **Course Format:**

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

Lecture 3.0 h + Seminar 0.0 h + Lab. 1.0 h

Credits: 3.0 Transfer Credit: For information, visit bctransferguide.ca

#### **Course Description, Prerequisites, Corequisites:**

An introductory course in statistics developed through the concept of randomness for students in social sciences, nursing, social work, physiotherapy, business, etc. Topics will include sampling, experimental design, levels of measurement, descriptive statistics, regression, sampling distributions, normal distribution and inferential procedures of estimation and hypothesis testing. This course may be followed by STAT 1224.

Students will recieve college credit for only one of STAT 1123, 1124, or 1181. Students will recieve college credit for only one of PSYC 2321 or STAT 1124.

Prerequisite(s): One of the following: a minimum "C" grade in Foundations of Mathematics 11, Precalculus 11, Foundations of Mathematics 12, or Precalculus 12; an "S" grade in MATH 1150; or MDT 053. Prerequisites are valid for only three years.

# **Learning Outcomes:**

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

- Describe sampling designs and explain bias in sampling
- Distinguish between observational and experimental studies
- Select and apply the appropriate techniques for describing one- and two-variable data and interpreting the results
- Solve basic problems in probability
- · Carry out basic tests of significance
- Calculate and interpret confidence intervals
- Apply statistical methodology in real-life examples using everyday language
- Use statistical software to perform data analysis and to interpret the output
- Produce a report that satisfies a set of criteria in a statistical investigation

"This generic outline is for planning purposes only".





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 <a href="https://mycampusstore.langara.bc.ca/buy">https://mycampusstore.langara.bc.ca/buy</a> 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 25%

Other Assessments 75%

(An example of other assessments might be:)

Term Tests (2) 30% Project 10% Homework 15% Quizzes 20%

## **Grading System:**

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

Information unavailable, please consult Department for details.

# **Topics Covered:**

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

- Univariate Data, Normal Distributions
- Bivariate Data: Correlation, Regression, Residuals, χ2 Test
- Introduction to Probability, Random Variables, & Probability Distributions
- Sampling Distributions
- Estimation of and Statistical Inference for Population Means and Proportions

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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:**

Information unavailable, please consult Department for details.

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