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CURRICULUM GUIDE: OFFICIAL COURSE OUTLINE

Course Code	STAT 200	Course Title	Introduction to Statistics			
Credit Value	3	Department	Mathematics and Science			
No. of weeks	14	Hrs. per week	*Lecture*	*Tutorial*	*Laboratory*	*Total*
			3	1	0	4
Course Description	Statistical research methodology and associated techniques aimed at a non-mathematical audience (non-calculus based). This course introduces procedures that are most commonly used in the investigation of survey and experimental data.					
Prerequisite(s)	ENGL 098, MATH 12(C) or MATH 100, and completion of at least 9 post-secondary credit hours					

Initial Articulation Targets	*UBC*	*SFU*	*UVic*	*UNBC*	*TRU*
	STAT 200 (3)	STAT 201 (3)	STAT 255 (1.5)	STAT 240 (3)	STAT 2000 (3)
	For updated information on the transferability of this course, please consult the BC Transfer Guide, www.bctransferguide.ca				

Learning Outcomes

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

- Calculate and interpret standard numerical descriptive statistics
- Construct and interpret standard graphical descriptive statistics
- Describe various experimental and observational studies
- Identify and carry out inferential procedures for basic one-sample and two-sample problems in both the categorical and continuous contexts
- Identify and carry out inferential procedures for the one-way analysis of variance design and simple linear regression

Content

Core topics – all of the following will be covered:

- Week 1: Picturing Distributions with Graphs and Describing Distributions with Numbers
- Week 2: The Normal Distributions
- Week 3: Scatterplots, Correlations and Regression
- Week 4: Two-Way Tables and Review
- Week 5: Producing Data – Sampling and Experiments
- Week 6: Introducing Probability and Sampling Distributions
- Week 7: Confidence Intervals – The Basics of Confidence Intervals and Tests of Significance
- Week 8: Inference in Practice and Review
- Week 9: Inference for Regression
- Week 10: Inference for a Population Mean
- Week 11: Two Sample Problems

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	• Week 12 Inference about a Population Proportion • Week 13: Two Categorical Variables – The Chi-Square Test • Week 14: One-Way Analysis of Variance – Comparing Several MeansFrancophone experiences in Canada. Additional topics may also be covered, at the discretion of the instructor.
Methods of Instruction	Lectures, problem sessions (tutorials), and assignments
Required Textbook(s)	The following textbook(s) is/are required, or approved equivalent(s). Moore, D.S., Notz, W.I. and Fligner, M.A. The Basic Practice of Statistics, Seventh Edition: Macmillan, 2015.
Required Equipment and Technology	Students are required to have a computer with internet access. The following resources are provided by the College: • Office 365 • Student email
Homework Hours	At minimum, students can expect one hour of homework for every hour of instructional time.

Evaluation	*Component*	*% Value*
	Assignments	20%
	Midterm	20%
	Course Project	20%
	Final Exam	40%

Completion Requirements	The minimum grade to pass this course is D (50%). Unless otherwise stated, a minimum grade of C- (55%) is required for this course to fulfil a prerequisite.		
Course Designer(s)	Tim Swartz, Ph.D., Department of Statistics and Actuarial Science, Simon Fraser University	Consultant(s), *if applicable*	
Dean's Approval	Barbara Moon, Ph.D. Professor Emeritus, Department of Biology, University of the Fraser Valley	Dean's Approval Date	January 1, 2015
Curriculum Committee Approval Date	January 1, 2015	First Term Offered	
Last Review Date	February 5, 2020	Next Review Date	February 5, 2025

Revision History	April 29, 2015-Library resources added by Librarian

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