

CAPILANO UNIVERSITY COURSE OUTLINE			
TERM: Fall 2017		COURSE NO: LBST 201	
INSTRUCTOR:		COURSE NAME: Refiguring Knowledge -- Introduction to Research Methods	
OFFICE:	LOCAL:	SECTION NO(S):	CREDITS: 3
E-MAIL:			
OFFICE HOURS:			

COURSE FORMAT: Three hours of class time, plus an additional hour delivered through on-line or other activities for a 15-week semester, which includes two weeks for final exams.

COURSE PREREQUISITE: Pre-calculus 11 (C) or Foundations of Math 11 (C) or Principles of Math 11 (C) or 044 (C) or BMTH 048 (C) or Math Placement Test (Basic MPT).

Note: This is an approved Quantitative/Analytical course for baccalaureate degrees.

COURSE DESCRIPTION: This course introduces students to the various stages of the research process and provides them with an understanding of quantitative research methods and allied mathematical and statistical concepts which will enable students to engage in undergraduate research and work effectively with data. Specifically, students will acquire the knowledge and ability to apply quantitative methods to research that includes gathering and interpreting data.

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

- explain the various stages of the research process;
- identify and describe the broad range of quantitative research methods, including their advantages and limitations;
- display, describe and summarize categorical and quantitative data using descriptive statistics;
- use scatterplots and regression to explore relationships between variables and use these relationships to model applications and real-world situations
- describe the main properties of probability distributions and random variables, both discrete and continuous
- interpret a confidence interval and a confidence level
- identify and apply the components of a hypothesis test, including the parameter of interest, the null and alternative hypotheses and the test statistics
- design and apply different research techniques (e.g. survey, correlational, and experimental) within a variety of settings;
- collect research data and prepare the information for analysis.

COURSE WEBSITE: TBA

REQUIRED TEXT:

Robson, C. (2011). *Real World Research, 3rd edition*. Wiley.

COURSE CONTENT:

Topic I	Intro to Scientific and Statistical Reasoning (1 week)
Topic II	Intro to Quantitative Methods of Research and of Data Analysis (2 weeks)
Topic III	Survey Design and Implementation (1 week)
Topic IV	Analyzing and Understanding Survey Data (1 week)
Topic V	Modelling Data (2 weeks)

Topic VI	Correlational and Experimental Research Method Design (2 weeks)
Topic VII	Analysis of Experimental Data, Including Probability Distributions (2 weeks)
Topic VIII	Hypothesis Testing and Inferential Statistics (2 weeks)
	Final Exam Period (2 weeks)

COURSE ASSIGNMENTS: The course assignments, including the exams, provide hands-on opportunities to work the various research methods introduced in this course through research problems and data sets informed by the current Liberal Studies term theme.

EVALUATION PROFILE:

Assignments:	15%
Projects:	25%
Tests:	30%
Final Exam:	30%
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TOTAL	100%

GRADE PROFILE:

A+ = 90 - 100%	B+ = 77 - 79%	C+ = 67 - 69%	D = 50 - 59%
A = 85 - 89	B = 73 - 76	C = 63 - 66	F = 0 - 49
A- = 80 - 84	B- = 70 - 72	C- = 60 - 62	

OPERATIONAL DETAILS: Capilano University has policies on Academic Appeals (including appeal of final grade), Student Conduct, Cheating and Plagiarism, Academic Probation and other educational issues. These and other policies are available on the University website.

<u>Attendance:</u>	Attendance will be taken. Failure to attend classes regularly will inevitably result in poor grades.
<u>Late Assignments:</u>	Late assignments will be penalized, unless a formal extension is given in advance of the deadline. An extension is given only under exceptional circumstances, usually requiring a doctor's note.
<u>Missed Exams:</u>	Make-up tests are given at the discretion of the instructor. They are generally given only in medical emergencies or severe personal crisis. Students should be prepared to provide proof of inability to write the test on the scheduled date.
<u>English Usage:</u>	It is the responsibility of students to proofread all written work for any grammatical, spelling and stylistic errors. Marks will be deducted for incorrect grammar and spelling in written assignments.
<u>Incomplete Grades:</u>	Given at the discretion of the instructor. Generally given only in medical emergencies or severe personal crises.
<u>Electronic Devices:</u>	No personal electronic devices (cell phones, laptops) may be used during an exam. During class, please turn off all cell phones. Laptops can be used for note-taking purposes only.
<u>Emergencies:</u>	Students are expected to familiarise themselves with the emergency procedures posted on the wall of the classroom.