



Students requiring accommodations as a result of disability must contact the Centre for Students with Disabilities 778-782-3112 or csdo@sfu.ca

Instructor: Marie Loughin (Statistics Major/Honor Students)
Instructor: Peter Muirhead (Actuarial Science Major/Honor Students)

Prerequisite:

Admission to the major or honors programs in statistics or actuarial science at SFU. Corequisite: STAT 350.

Calendar Description:

Guided experiences in written and oral communication of statistical ideas and results with both scientific and lay audiences. **Writing.**

Outline:

This course exposes students to some examples of writing related to the field of statistics. These may include technical reports for both statistical and lay audiences, consulting reports, and critiques (e.g. of the use of statistics in the media). A framework called The Statistical Method (MacKay and Oldford, Statistical Science, 2000) may be used as a guideline for report content and for conducting statistical work in general.

Writing requires an in-depth understanding of the subject matter. Therefore, **students are encouraged to take this course in their fourth year.** Completion of STAT 350 is highly recommended.

The course will give students the opportunity to receive feedback on their writing from the instructor, possibly a TA, and their classmates. Each student will complete several reports during the semester. The first draft of some reports will be critiqued and returned. For these reports, students are expected to respond to the critiques and submit a final version. One or more report will include an in-class, oral presentation. Report marks will be based both on writing technique and statistical content. In addition, students are expected to complete homework and in-class assignments, and will be marked on their contribution to seminar-type discussions led by the instructor.

It is assumed that you are familiar with the following topics:

- Elementary probability theory, including properties of the normal, Poisson, binomial, etc., distributions
- Confidence intervals, p-values, hypothesis testing
- Linear regression theory and Maximum Likelihoods.
- Other standard data analysis tools (diagnostic plots, t-tests, ANOVA methods, etc.)

The course will involve seminars for three hours per week.

Grading Scheme:

Class participation – 10%

Homework – 15%

Quiz, Test, and or Presentations – 15%

Projects – 60%

Grading is subject to change.

Students should be aware that they have certain rights to confidentiality concerning the return of course papers and the posting of marks. Please pay careful attention to the options discussed in class at the beginning of the semester. Students are reminded that Academic Honesty is a cornerstone of the acquisition of knowledge. Scholarly integrity is required of all members of the University. Students are encouraged to review policies pertaining to academic integrity available on Student Services webpage at <http://students.sfu.ca/academicintegrity.html>

Students looking for a Tutor should send an email to stat@sfu.ca with “Tutor Request” in the subject line. Please only include information that you would like forwarded to our tutors mailing list.