



Students requiring accommodations as a result of disability, must contact the Centre for Students with Disabilities 604-291-3112 or csdo@sfu.ca

Instructor: [Dr. Larry Weldon](#)

Prerequisite:

Admission to major or honors programs in statistics or actuarial science at SFU.

Calendar Description:

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

Outline:

The course will involve seminars for three hours per week.

The objectives of the course are:

1. To provide students with a vocabulary which facilitates written verbal communication of statistical ideas and statistical results.
2. To provide guided experience in writing technical reports of data-based studies.
3. To provide guided experience in writing about statistical concepts to a non-technical audience.

The course would give students the opportunity to receive feedback from the instructor, a TA, and peer students in the class, on their writing. Students would be assigned writing tasks involving reports of data-based studies. Sources for the studies would include statistical and scientific journals or small scale data-based studies performed by the students themselves. Assigned writing tasks would include summary reports of published studies, or critiques of studies.

The first draft of such reports would be critiqued but not marked. Students would be expected to respond to the critiques and resubmit a final version for marking. Each student would complete approximately six such reports during the semester. Students would also be marked on their contribution to seminar-type discussions led by the instructor.

The choice of data-based study to present each week will be up to the instructor. However, data sources could include any of the following:

1. Data is collected by the students themselves as directed by the instructor, directed at a particular question.
2. A video describing a scientific project could be presented.
3. Data extracted from public data bases: Statistics Canada, Canadian Institute of Actuaries
4. Students could be asked to extract descriptive information from individual masters projects in statistics or actuarial science.
5. Published scientific studies could be used as a basis for a summary report.

The task in reports could be either to draft a formal report (such as might be prepared for an applications journal or technical magazine) or it could be a less formal report aimed at making objectives and results clear to a lay audience. An assignment might involve two reports of the same study, the difference being the degree of familiarity of the audience to statistical jargon.

Grading Scheme:

20% - Timely submission of draft reports for critiquing.

20% - Participation in class discussions.

60% - Response to critique and the quality of the final submission of the reports.

Quality of reports will involve assessment of report layout, scientific logic and language clarity.

There will be no final examination.

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. Please consult the General Guidelines of the calendar for more details.