Statistical Consulting

STA2453, Department of Statistical Sciences, University of Toronto

Course Information

This course is designed to provide graduate students in statistics with experience in statistical consulting and with some of the skills required to be an effective consultant. The course will be offered over the entire year, but the overall work load will be approximately equivalent to a half-credit graduate course.

Learning Objectives

- Understand standard statistical methodologies used in practical applied problems.
- Learn about appropriate and inappropriate use of standard statistical methodologies.
- Verbal and written communication of standard statistical methodologies to non-statisticians.

Organisation

The course will consist of classroom discussion and instruction, meeting with clients, and data analysis projects for clients.

A small group of students will meet with a client every other week. Each week a student will be assigned to a client. The student, with help from the professor, will be responsible for advising the client on an appropriate statistical approach to their problem, implementing the approach, and communicating the results.

Class meetings or consulting rounds will consist of student presentations and discussions related to client projects.

What are Consulting Rounds?

http://utorontostatconsulting.wordpress.com/course-information/
Consulting rounds are class meetings in which students present to the rest of the class the details of client meetings. They have two purposes: to share your experiences with the rest of the class so that all students will have the benefit of your experiences, and to facilitate discussion to help solve client problems.

We will use the consulting rounds sessions to discuss all aspects of the client meetings. Student presentations should cover:

- client-consultant communication
- role of the consultant in the project
- suggested statistical approach
- statistical methodology
- follow-up with client

**Evaluation**

Final grades will be weighted as follows:

- Participation in client meetings and follow-up with clients (30%)
- Class presentations in rounds (35%)
- Client meeting reports (25%)
- Professional conduct (10%)

All work will be graded on a scale from 1 to 4 (sometimes with plusses and minuses) where:

1 = work does not meet expectations

2 = work meets expectations minimally, possibly missing some

3 = good work; meets all or most expectations

4 = work exceeds expectations

Grades will almost always be 2 or 3 (1's and 4's are rare). Generally speaking, a 2 is a B, a 3 is an A and a 4 is an A+.