

STAT 551 - STATISTICAL CONSULTING
2011 - 2012

Term 1, T & Th 9:30-10:50, LSK 301

Instructor: John Petkau, LSK 328

Calendar Description: Supervised statistical practice directed toward the solution of current problems posed by subject-area researchers.

Prerequisite: STAT 550 and adequate writing ability, as measured by completion of UBC's English 100, or by achieving a score of 4 or higher on the Language Proficiency Exam (a test administered at UBC).

Remarks: This course gives students practical experience in consulting and in the application of statistical thinking and techniques to current subject-area research problems. Students will apply the basic skills of consulting, developed in STAT 550, to problems posed by subject-area researchers in response to a widely distributed announcement of STAT 551. Course activities include meeting with clients, formulating approaches to clients' problems, making oral presentations, and writing reports summarizing results and recommendations.

Students should aspire to:

- Effectively communicate orally and in writing with non-statisticians so clients understand and can apply your advice.
- Gain practical consulting experience from their clients as well as from other students' clients.

Required Text: None

Selected References:

- Boen, J.R. and Zahn, D.A. (1982). *The Human Side of Statistical Consulting*. Lifetime Learning Publications.
- Cabrera, J. and McDougall, A. (2002): *Statistical Consulting*. Springer.
- Chatfield, C. (1995). *Problem Solving: A Statistician's Guide, 2nd edition*. Chapman & Hall.
- Cohen, A.R. and Bradford, D.L. (1991). *Influence Without Authority*. John Wiley and Sons.
- Derr, J. (2000). *Statistical Consulting: A Guide to Effective Communication*. Brooks/Cole.
- Fisher, R. and Ury, W. (1981). *Getting to Yes*. Houghton-Mifflin.
- Hand, D.J. and Everitt, B.S. (1987). *The Statistical Consultant in Action*. Cambridge.
- McGuire, P.J. and Putzell, S.M. (1988). *A Guide To Technical Writing*. Harcourt.
- Samuels, M.S. (1989). *The Technical Writing Process*. Oxford University Press.
- Strunk, W., White, E.B. and Angell, R. (2000). *The Elements of Style, 4th edition*. Pearson Higher Education.

Notes:

1. Students who are required to take STAT 551 may apply for an exemption based on previous equivalent coursework or consulting experience.
2. STAT 551 is graded on a Pass/Fail basis. To earn a Pass, the requirement in the past has been that students must satisfactorily complete reports for four clients **during the term**.
3. The skills developed in STAT 551 are essential for effective employment as an applied statistician. The skills required to interact effectively with non-statisticians in collaborating on research problems will be valuable no matter what career path you are contemplating.