STAT 4700/7290 Section A01
Statistical Consulting

Description The **goal** of the course is to provide training and experience in statistical consulting. We will discuss the role of the statistics consultant. Emphasis will be on consulting skills as well as statistical thinking. Students will be exposed to realistic statistical and scientific problems that appear in typical interactions between statisticians and clients (researchers, scientists, business people, etc.) Course work will involve in class discussions, meeting with clients, formulating approaches to problems posed by clients, analyzing data, writing reports, and oral presentations.

Prerequisites STAT 3800 or the former STAT 3600 (005.360) (C); and STAT 3480 (005.348); or consent of department. Prerequisites or concurrent requirements: STAT 4520 and STAT 4530.

Semesters Fall 2013 & Winter 2014
Time 9:30 AM–10:20 AM, M. W. F.
Location 316 Machray Hall
Web Page `http://home.cc.umanitoba.ca/~koulist/stat470729`

Instructor Dr. Theodoro Koulis
320 Machray Hall
Telephone: 474-8205
Email: `theo.koulis@umanitoba.ca`

Office Hours Th. F.   1:00 PM–2:30 PM (**AND** by appointment. Drop in and ask me any statistics related problem.)

Marks

Classroom participation:	10%
Assignments:	30%
Presentation:	10%
Analysis of dataset (report):	20%
Consulting Project (report):	20%
Consulting Project (presentation):	10%

There is no final exam. Extensions for assignments and projects will not be given. Extensions will be granted if additional work is required.

Schedule September-December: Techniques of statistical consulting:
· Role of the statistical consultant
· Communication Skills
· Case studies
· Write-ups, data analysis & discussions.

January-April: Statistical consulting:
· Data analysis project
· Consulting project
· Presentations of consulting projects

References   J. Spurrier. *The practice of statistics: putting the pieces together*, Duxbury Press, 1999.

J.R. Boen and D.A. Zahn, *The human side of statistical consulting*, Research Methods Series, Lifetime Learning Publications, 1982.

J. Derr, *Statistical consulting: a guide to effective communication*, Statistics Series, no. v. 1, Duxbury Thomson Learning, 2000.

J. Cabrera and A. McDougall, *Statistical consulting*, Springer, 2002.

D.J. Hand and B. Everitt, *The statistical consultant in action*, Cambridge University Press, 1987.

Note: It is important that you understand what constitutes academic dishonesty and that you are familiar with the very serious consequences. Links to resources that describe academic dishonesty (including plagiarism, cheating, inappropriate collaboration and examination impersonation) can be found at:

http://umanitoba.ca/faculties/science/undergrad/resources/
webdisciplinedocuments.html

or through the Faculty of Science home page at:

http://www.umanitoba.ca/faculties/science.

Typical penalties imposed within the Faculty of Science for academic dishonesty are also described.