STAT8801, Statistical Consulting

2:30 – 3:20 MWF, Akerman 211, Mpls Campus

Instructor

Aaron Rendahl, 366 Ford, 612-625-8599 (Mpls) 612-625-1062 (StP), arendahl@stat.umn.edu.

Office hours will be 1:15-2:15 MW, and by appointment or email.

Texts and Readings

While no book is required, there are several useful books including *Statistical Consulting* by Javier Cabrera and Andrew McDougall (2002), *Statistical Consulting: A Guide to Effective Communication* by Janice Derr (1999), *Human Side of Statistical Consulting* by James R. Boen and Douglas A. Zahn (1982), and *Statistical Rules of Thumb* by Gerald van Belle (2002).

There will be frequent handouts and occasional articles from the professional and popular press for reading.

Class Web Page

All handouts and readings will be posted on the class webpage, http://www.stat.umn.edu/~arendahl/Teaching/STAT8801-2010Spring.

Course Grade

This course must be taken S/N. Grading will be based on the following:

- 1. Approximately 10 group assignments. The class will be divided in three groups, which will be changed each week. Each group will work together on the assignment, which may be data analysis, critical comments on published articles, or some other assignment. The group leader will then summarize the group's work in a 12 minute presentation to the class. All students will do one or two presentations. Students only assigned one presentation will also be assigned to moderate a given week's presentations.
- 2. Up to three short written assignments.
- 3. One individual presentation of about 10 minutes on a topic about which you most likely know nothing but will use any resources you can, including books and articles as well as the internet, to learn enough to give the talk. Topics will be randomly assigned.
- 4. Classroom participation, including participation in at least one consulting role-playing situation. Without your input, this will be a very dull course. Speak up! Since this is a graduate level course, no formal attendance policy will be in place. However, if you miss class regularly, I will ask you to meet with me to discuss how you may meet this requirement of the course.

Curriculum

The course has four threads: professional practice, communication, technical tools, and case studies. Professional practice deals with ethics, working with clients, defining problems, interpersonal skills, operating a business, and professional growth. Communication deals with effective writing, oral presentation, presentation of data via tables and graphs, and publication. Technical tools include some techniques, but mostly thinking about and learning about new ideas, approaches, and techniques.

Disabilities

Students with disabilities that affect their ability to participate fully in class or to meet all course requirements should bring this to my attention so that appropriate accommodations can be arranged. You may also wish to contact Disabilities Services.

Acknowledgments

This course is based on a course developed by Douglas Hawkins and adapted and revised by Gary Oehlert in Fall 2007 and Sandy Weisberg in Spring 2008.