Statistics 6750 Syllabus
Fall 2013

Instructor
Dr. Christopher Holloman
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Office Hours: Monday 2 – 4 PM
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Course Description
This course will investigate the role of the statistician as both consultant and collaborator; guide students in enhancing problem solving and communication skills; teach students to structure working engagements with non-statisticians and collaborators; introduce to technical skills specific to statistical consulting; and provide experience working on consulting projects.

Website
Web content for this course will be provided through Carmen (carmen.osu.edu). Important announcements, lecture notes, datasets, discussions, and other information about the class are posted on the course website. In addition, all homework assignments must be submitted through Carmen.

Textbook
No textbook is required for this course.

Lectures
M 9:05 – 11:55 AM, Denney 214. Each class session will include a 5-minute break around 10:00.

Lecture notes will be posted on the course website before class. There may be parts of the notes that you wish to fill in during lecture, and you may need to take separate notes on examples that are not in the lecture notes.

Computing
For this course, you will be allowed to use whatever statistical computing software you prefer. R is recommended for all statistical analysis and will be used in examples throughout the class. Minitab, SAS, or SPSS may be more useful for completing some assignments. Determining which software is most efficient for accomplishing particular statistical tasks will be discussed as part of the class.

Homework Assignments
Homework will be assigned during class and collected through Carmen. In general, homework assignments will require you to think through a particular consulting problem or practice statistical analysis on a dataset. During the class after each assignment is made, you may be called upon to report your findings or thoughts to the class.

Exams and Projects
This class will not have any exams, but there will be a short quiz at the end of each class. In addition, there will be a project in which you will perform statistical consulting for a client. As part of the project, you will meet with the client, analyze a dataset, and report the results of your analysis to the class in a short presentation. Students will work in groups for this project. Grading on the project will be a combination of instructor grade and evaluation by your teammates.
Grading
Grading for Statistics 6750 is on a pass/fail basis. The pass/fail status of each student will be determined based on that student’s class participation (20%), homework/quiz performance (40%), and contribution to the final project (40%).

Special Accommodations
If you need any accommodations based on the impact of a documented disability contact the instructor privately to discuss your specific needs. You should also contact the Office of Disability Services to coordinate special accommodations.

Academic Misconduct
Academic misconduct will not be tolerated and will be dealt with procedurally in accordance with university policy. One example of a behavior that will be considered academic misconduct is the use of any part of a presentation or analysis created by an individual outside your working group during the preparation of your group project presentation.

Course Admission and Section Changes
The instructor will not, under any circumstances, sign paperwork regarding course admission. Go to the Statistics Department office (404 Cockins Hall) for a handout on adding and section change procedures. Changes are handled in 405A Cockins Hall.

Student Evaluation of Instructor
SEIs for this class will be administered electronically. You can fill out an SEI any time between November 22, 2013, and December 4, 2013. Visit sei.osu.edu for more information.

Tentative Class Schedule
8/26/2013 – Introduction, Ground Contaminant Example, Stock Market Example
9/2/2013 – No class (Labor Day)
9/9/2013 – General Communication, Type III Errors
9/16/2013 – Project Communication, Difficult Situations
9/23/2013 – Project Process and Organization, Project Introduction
9/30/2013 – Data Diagramming, Operational Definitions, Measurement
10/7/2013 – Data Management, Software
10/14/2013 – Process View of Data, Process Mapping
10/21/2013 – Scientific Method, Analytic and Enumerative Studies
10/28/2013 – Exploratory Data Analysis
11/11/2013 – No class (Veterans Day)
11/18/2013 – Class Presentations
11/25/2013 – Project Feedback, Building a Model from Fundamental Constructs
12/2/2013 – Monte Carlo Methods, Choosing the Right Distribution for your Model