STAT:6220
Statistical Consulting
Spring 2018

Instructor:

Rhonda DeCook
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Class Time and Location:

MWF 8:30-9:20pm 15 Schaeffer Hall

Course Goals and Objectives:

The primary goal for this course is for students to gain some experience in applying statistical methods as a statistical consultant. The intention is to have students work with a client from another discipline and/or data generated from a client, and perform an appropriate analysis. You will draw upon the statistical methods you have learned in your courses up to this point, **and you will likely need to expand your 'statistical toolbox' by reading statistics journal articles, statistical texts, or other resources, regarding new types of analyses.** Additional goals include communicating statistical ideas orally and in writing, and gaining knowledge of ethical practices (for human-subjects-related research).

Course Websites:

Course notes and assignments
http://homepage.stat.uiowa.edu/∼rdecook/stat6220.html

Consulting progress reports and presentation schedule
https://wiki.uiowa.edu/display/73470

Office Hours (or by appointment*):

Monday 9:30-11am
Wednesday 9:30-11am
*I expect a large amount of communication in this course to occur through email.

Final Exam: Date to be determined.

Text:

None required. I expect we will read some journal articles which will be available on-line or provided as hardcopies. I may also use excerpts from texts which will be provided to you.

Software:

You should have knowledge of SAS and R as a prerequisite for this course. You will probably use both, depending on the particular analyses that you work on, and the assignments that I give. If you have knowledge of other statistical software packages (such as STATA, or SPSS), please let me know, as we could potentially put that knowledge to good use.

Coursework:

Assignments -

There will be some regular assignments in the course that will be turned-in. The topic and structure (as well as the timing) will depend on our class-client involvement. Some possible assignments: perform an analysis on a data set and provide a report/write-up as you would give to a client, read a journal article on a new type of analysis, write a 'mock' journal article, or respond in writing to a statistical question asked by a non-statistical client. One known assignment will be to get certified in human subjects protections (http://hso.research.uiowa.edu).

Client work -

You will be spending time on very individualized projects related to client work with individuals from around the University or the local community. You will work in pairs or small groups on these projects. I will attend some client meetings, but (most likely) not all of them. Presently, I have some clients available for our course, but if you are aware of any potential clients, please let me know.

We may often begin class with a *check-in*, where members of each project team describe the current status of their projects. After check-in, we may spend the remaining time discussing certain client projects in depth, or discussing 'hypothetical' client projects or issues. The number of projects any one student is assigned to or completes depends on the complexity of the projects and the number of clients available.

I expect students to present their analyses of client work in class. If the client is available, I would also like them to come to class during the presentation. These presentations will probably be followed by questions or discussion.

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IMPORTANT NOTE:
  Though you will work with other students on your projects, EACH STUDENT
  SHOULD DO EVERY PART OF THE ANALYSIS.  Do not break the job into parts
  in order to be more efficient.  Consulting is a learned skill.  You are
  working together for support, not to complete a job faster.
              -- You get back what you put into it. --
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Attendance/Missed class -

Attendance is *crucial* in this course. I absolutely expect students to be in-class for all the presentations (dates will be posted in advance), and to be at class on a regular basis. If you *must* be gone for a presentation (client or consultant), please inform me in advance of the conflict and we will discuss options for you to make-up the absence.

If you miss a class that had 'active participation', you will need to make-it up.

I plan to take formal attendance in this course. I will take attendance into consideration for grades (see below under Grading Policy).

Progress Reports on the Iowa Wiki -

We will have an on-line repository related to client work. You will need to update the 'Progress Report' section of the repository related to your client at an appropriate pace (shortly after any work or meeting has occurred). Everyone will have access to the progress reports, as it is beneficial in this course to see the statistical work that others are doing.

First Draft/Final Report -

For each client you work with, you will be expected to provide a final report shortly after the project is declared complete. For your 'primary client' (terminology that is only relevant if you have more than one client), you will need to turn-in a first draft of the report for which I will proof-read, provide input, and then return to you for further editing. I will provide you with a list of content items that are missing (or need to be expanded upon) and any other edits that need to be made. You will be expected to include the missing items and edits in your final draft before it is accepted as complete.

Each student must write his or her own individual written report.

Grading Policy:

Students will be graded on the S/U scale. Every student must show evidence of significant activity in the course and on the projects. Verification of contribution by group members may be sought through questionnaires. Questionnaires suggesting non-contribution by a member (or low-quality of input) may affect the student's S or U grade.

As mentioned earlier, attendance is *crucial* in this course. I will take attendance into consideration for grades, and specifically, **to receive a satisfactory (S) grade in the course, you must attend at least 90% of the classes.**

Progress reports must be provided by students actively working with clients. In general, this will be a weekly activity report provided on the Wiki page. The intention is to keep me informed of your progress, and chronicle the steps taken in the consulting process. I will let you know if I feel that your progress reports are not appearing in a timely fashion, or are minimal in content. If so, you will be expected to improve upon these items.

All project final reports will be evaluated and scored on a scale of 0 to 5. In order to earn an S, you must average a 3.5 or higher. You must also be satisfactory (S) on all other assignments and/or progress reports, and attendance.

I expect students to not leave any clients *hanging* at the end of the semester. If a project is not complete, you can at least provide a preliminary report to your client as a place for them from which to continue. Please allow this course to continue receiving clients in the future... i.e. please be professional (be on-time, be clear, be courteous, etc.)

Administrative Home of the Course:
The College of Liberal Arts and Sciences is the administrative home of this course and governs matters such as the add/drop deadlines, the second-grade-only option, and other related issues. Different colleges may have different policies. Questions may be addressed in 120 Schaeffer Hall or see the CLAS Student Academic Handbook:
http://clas.uiowa.edu/students/handbook

Electronic Communication :
University policy specifies that students are responsible for all official correspondences sent to their University of Iowa e-mail address (@uiowa.edu). Faculty and students should use this account for correspondences (Operations Manual, III.15.2, k.11).

Reacting Safely to Severe Weather :
In severe weather, class members should seek appropriate shelter immediately, leaving the classroom if necessary. The class will continue if possible when the event is over. For more information on Hawk Alert and the siren warning system, visit the Department of Public Safety website.

Academic Honesty:
All CLAS students have, in essence, agreed to the College's Code of Academic Honesty: "I pledge to do my own academic work and to excel to the best of my abilities, upholding the IOWA Challenge. I promise not to lie about my academic work, to cheat, or to steal the words or ideas of others; nor will I help fellow students to violate the Code of Academic Honesty." Any student committing academic misconduct is reported to the College and placed on disciplinary probation or may be suspended or expelled (CLAS Academic Policies Handbook).

Accommodations for Disabilities :
The University of Iowa is committed to providing an educational experience that is accessible to all students. A student may request academic accommodations for a disability (which include but are not limited to mental health, attention, learning, vision, and physical or health-related conditions). A student seeking academic accommodations should first register with Student Disability Services and then meet with the course instructor privately in the instructor's office to make particular arrangements. Reasonable accommodations are established through an interactive process between the student, instructor, and SDS. See http://sds.studentlife.uiowa.edu/ for information.

Understanding Sexual Harassment :
Sexual harassment subverts the mission of the University and threatens the well-being of students, faculty, and staff. All members of the UI community have a responsibility to uphold this mission and to contribute to a safe environment that enhances learning. Incidents of sexual harassment should be reported immediately. See the UI Comprehensive Guide on Sexual Harassment for assistance, definitions, and the full University policy.

CLAS Final Examination Policies:
The final examination schedule for each class is announced by the Registrar generally by the fifth week of classes. Final exams are offered only during the official final examination period. No exams of any kind are allowed during the last week of classes. All students should plan on being at the UI through the final examination period. Once the Registrar has announced the date, time, and location of each final exam, the complete schedule will be published on the Registrar's web site and will be shared with instructors and students. It is the student's responsibility to know the date, time, and place of a final exam.

Making a Suggestion or a Complaint :
Students with a suggestion or complaint should first visit the instructor (and the course supervisor), and then the departmental DEO. Complaints must be made within six months of the incident (CLAS Academic Policies Handbook).

DEO Contact Information:
Statistics and Actuarial Science
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