Course and Contact Information

Course: Statistics, Introduction to Statistics in Social Science, 1053-11
Semester: Fall, 2016
Meeting time: Monday and Wednesday: from 12:45pm to 2:00pm
Location: Building 1957 E street, Room 214
Lab: Recitation section Statistics 1053-40 or 1053-41 on Thursdays

Instructor
Name: Michael D. Larsen, PhD
Campus Address: 765 Rome Hall, 801 22nd Street NW, Washington DC 20052
Phone: 202-994-6356
E-mail: mlarsen@gwu.edu
Office hours: Wednesday, 11:45am-12:30pm (Rome 765) and 2:00-2:45pm (outside class)

Teaching assistant
Name: Lingjie Zhou, MS from GW, currently PhD student
Email: zhou.lingjie@gwu.edu

Bulletin Course Description

STAT 1053. Introduction to Statistics in Social Science. 3 Credits. Lecture (3 hours), laboratory (1 hour). Frequency distributions, descriptive measures, probability, sampling, estimation, tests of hypotheses, regression and correlation, with applications to social sciences.

The course will cover the basics of probability, research design, descriptive statistics, and inferential statistics. Examples will be used throughout and drawn from a variety of fields, including the social sciences.

Prerequisites
No calculus prerequisite or assumption of prior courses in statistics or experience with computing.

Note: Statistics 1051, 1053, 1091, 1104, 1111, and 1127 are similar courses and credit for only one of these courses can be given. Please contact me for further details.

Required Text(s)

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<tr>
<th>Author</th>
<th>Title</th>
<th>Edition</th>
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<tr>
<td>McClave and Sincich</td>
<td>Statistics</td>
<td>13th</td>
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Learning Outcomes:
1. Distinguish types of studies and their limitations and strengths.
2. Describe a data set including both discrete and continuous variables to support or refute a statement.
3. Apply laws of probability to concrete problems
4. Perform statistical inference in several circumstances and interpret the results in an applied context.
5. Use confidence intervals and hypotheses tests in statistical inference and explain their meaning.
6. Examine statistical modeling assumptions in contexts including linear regression and analysis of tables of counts
7. Use a statistical package to prepare a data analysis.

Average minimum amount of independent, out-of-class, learning expected per week:
According to GW: In a 15 week semester, including exam week, students are expected to spend a minimum of 100 minutes of out-of-class work for every 50 minutes of direct instruction, for a minimum total of 2.5 hours a week. A 3-credit course should include 2.5 hours of direct instruction and a minimum of 5 hours of independent learning or 7.5 hours per week.

Class Schedule [week-by-week] See supplement to this document.
NOTE: In accordance with university policy, the final exam will be given during the final exam period and not the last week of the semester

Assignments and Grades

Grading
- Two in-class exams (14% each; 28% total)
- Paper/project (8%),
- Final exam (30%)
- Homework (24%; 3% each for best 8 out of 9 assignments)
- Class participation/attendance/quizzes (10%; based on best 5 quizzes)

Assignments
Material to be delivered through the website includes syllabus, course information, lecture notes, assignments, assignment solutions, exam information, and practice exam problems and solutions. Students should download/print copies of handouts before class.

Homework assignments
- Assignments are due in class as noted in the syllabus and web page. A 20% penalty will be imposed on homework assignments submitted up to two days late. Solutions will be posted on the class web site.
- You may work together, but you must write your submitted work in your own words. This includes showing calculations, derivations, and proofs. This also includes summary sentences and paragraphs.
- If we are unable to quickly decipher what you did and wrote, then no credit will be given.
You are responsible for clearly and neatly organizing your homework and expressing your ideas. You should use complete sentences in answers requiring explanation and show intermediate steps in calculations and derivations.

Staple your papers together. Include your name, the assignment number, class, and date on your assignment.

**Exams**: Two one-hour midterm exams and a final exam. Information to be included on exams will be announced in class. Exam one will be Monday, October 10. Exam two will be Monday, November 14. The final will occur during finals period and will follow the schedule to be produced by the university registrar. If you have a conflict for any reason, you must let the instructor know before the exam. Failure to do so will result in a zero for the exam.

**Quizzes**: There will be short closed book quizzes in recitation/lab meeting. Dates of quizzes are posted online. Quizzes help you prepare for homework, practice for the exams, and earn some points. The value of the quizzes is up to 10% --- 2% each for your five best quizzes.

**University Policies**

**University Policy on Religious Holidays** [should be included verbatim]

1. Students should notify faculty during the first week of the semester of their intention to be absent from class on their day(s) of religious observance.

2. Faculty should extend to these students the courtesy of absence without penalty on such occasions, including permission to make up examinations.

3. Faculty who intend to observe a religious holiday should arrange at the beginning of the semester to reschedule missed classes or to make other provisions for their course-related activities.

**Support for Students Outside the Classroom** [should be included verbatim]

**Disability Support Services (DSS)**
Any student who may need an accommodation based on the potential impact of a disability should contact the Disability Support Services office at 202-994-8250 in the Rome Hall, Suite 102, to establish eligibility and to coordinate reasonable accommodations. For additional information please refer to: [gwired.gwu.edu/dss/](gwired.gwu.edu/dss/)

**Mental Health Services 202-994-5300**
The University's Mental Health Services offers 24/7 assistance and referral to address students' personal, social, career, and study skills problems. Services for students include: crisis and emergency mental health consultations confidential assessment, counseling services (individual and small group), and referrals. [counselingcenter.gwu.edu/](counselingcenter.gwu.edu/)

**Academic Integrity Code** [NOTE: reference to the code should be made and the url provided]
Academic dishonesty is defined as cheating of any kind, including misrepresenting one's own work, taking credit for the work of others without crediting them and without appropriate authorization, and the fabrication of information. For the remainder of the code, see: [studentconduct.gwu.edu/code-academic-integrity](studentconduct.gwu.edu/code-academic-integrity)