EDP 382K: Correlation and Regression Methods

Unique #75070, Summer 2015 T-Th 9:00-11:30am, SZB 524

Instructor Office Hours

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TA TA Office Hours

Course Description

This course is designed for students to master correlation and regression techniques. This class will focus on helping students learn how to identify when to use correlation and regression techniques, understand associated assumptions and how to test them, make the appropriate inferences, and describe and discuss correlation and regression and associated inferences.

Prerequisite

This course requires the use of several intermediate level mathematical/statistical skills and understanding. Students are required to have successfully completed an *Introduction to Statistics* graduate course. The instructor may approve equivalent graduate level courses.

Canvas: https://utexas.instructure.com

Announcements, course handouts, and grades will be posted on the course Canvas site.

Textbooks and Course Materials

Required

- Bobko, P. (2001). *Correlation and regression: Applications for industrial organizational psychology and management* (2nd ed.). Thousand Oaks, CA: Sage.
- Miles, J., & Shevlin, M. (2001). *Applying regression & correlation: A guide for students and researchers*. London: Sage.
- Calculator

Optional

Class handouts matching those used by the instructor during class will be made available on Canvas.
 Note that these handouts will provide a skeleton of what is being covered in class and thus will be an incomplete version of what is discussed in class. They are designed so that students can pay attention without having to write everything down that is said during class.

SPSS

Some examples utilizing SPSS will be given during class time, but students will be expected to calculate many of the statistics by hand in order to master the use (and interpretation) of the relevant formulas. Note that there are many different versions of SPSS available and they might look somewhat different from my version, and thus differ somewhat from the screenshots in the course overheads and from each other's versions. However, as these versions change, you will have to be flexible about figuring out where to find the relevant SPSS functions.

SPSS can be purchased on campus. There are also computers loaded with SPSS in some of the labs in the College of Education. Students are not required to use SPSS; however, if a student uses another statistical software program they will be responsible for learning how to properly run these analyses in the chosen program.

Classroom Expectations

Do not text, surf the Internet, check Facebook, email, etc. during class time as this distracts both you and the students seated around you. Please turn off your cell phone ringers when in class.

Class Attendance

Students are responsible for all material presented in lectures. It is expected that students will attend lectures, however, attendance will not be taken. If a student misses a class, regardless of the reason, the student is responsible for obtaining both the course material that was missed as well as any class announcements from his/her classmates.

Graded Assignments

This course is designed with the hope that students recognize the need to become actively involved with the material to improve their mastery of it. There are many and frequent assignments but they are designed to provide you with the practice necessary to become fluent in this subject area. The only way to master correlation and regression techniques (as is the case with most mathematical topics or techniques) is to use them. Thus, each of the assignments is designed to provide you with the opportunity to apply these techniques. There will be three types of assessments. Each type is listed below with a brief description.

- 1. **Homework** (120 points total). Watching the instructor perform calculations can result in the illusion of understanding. Only by running analyses yourself can you ensure your mastery of the material. Computational and interpretation practice will be provided in the form of homework.
- 2. **Portfolios** (2 @ 15 points each). There will be two short writing assignments called portfolios that ask you to apply the techniques mastered in this class within the context of your own field of interest. You will present a research question of interest that can be "answered" using a particular analytical technique, conduct the analysis, and write a report.
- 3. **Exams** (3 @ 100 points each). There will be three in-class exams. Each exam will consist of conceptual, computational, and application questions. Students must bring a calculator to the exams. To relieve test anxiety, and approximate a more authentic environment in which researchers have access to reference materials, students will be given a formula sheet for use during exams. The exams are not open-book because summary of learning should be accomplished before, not during, the exam. Missed exams may not be made up unless arrangements have been made prior to class. If you are late, you will not receive additional time.

Grading Scale

Grades will be posted on the Canvas website. Please periodically check for any input errors. Final grades will be assigned based on the percentage of accumulated points.

Overall Course Percent	Grade
93% - 100%	Α
90% - 92%	A-
87% - 89%	B+
83% - 86%	В
80% - 82%	B-
77% - 79%	C+
73% - 76%	С
70% - 72%	C-
67% - 69%	D+
63% - 66%	D
60% - 62%	D-
below 60%	F

No Extra Credit: Your course grades are based only on the above information. There will be no extracredit opportunities.

Grades of "Incomplete:" Grades of "Incomplete" will not be given unless the student can demonstrate that near catastrophic events have led to a case of extreme hardship.

Regrade Policy

If you think there may be an error in grading or grade input in Canvas, you should bring it to the TA's attention. Be prepared to discuss what problems you see with the grading. There is a <u>two-day</u> window from the time the grade is posted to make the TA aware of a grading or input error. After that, the grade is final.

Late Policy

If you have an exceptional circumstance or a serious illness, you must notify the instructor <u>before</u> the assessment is due so that we can discuss your options. If you do not get prior permission from the instructor, then the assignment will not be accepted late.

University Policy

Scholastic Dishonesty Policy

You are encouraged to study together often. However, there are times when you need to demonstrate your own ability to work and solve problems. Your exams are independent assignments. This means that exams are to be completed on your own, without discussion with your peers. You can work with other students to complete your homework, but you cannot copy answers from someone else. Students who violate these expectations can expect to receive a failing grade, be referred to the appropriate university officials, and may receive a maximum penalty of suspension or even expulsion from the University. For more information on scholastic dishonesty, students may review the Student Judicial Services website: http://www.utexas.edu/depts/dos/sjs/.

The University defines academic dishonesty as cheating, plagiarism, unauthorized collaboration, falsifying academic records, and any act designed to avoid participating honestly in the learning process. Scholastic dishonesty also includes, but is not limited to, providing false or misleading information to receive a postponement or an extension on a test or other class assignment, and submission of essentially the same written assignment for two courses without the prior permission of faculty members.

Students with Disabilities

Any student with a documented disability who requires academic accommodations should contact the Division of Diversity and Community Engagement, Services for Students with Disabilities, 512-471-6259, http://www.utexas.edu/diversity/ddce/ssd/. If you do have academic accommodations through the Services for Students with Disabilities Office, these must be brought to my attention as early in the semester as possible to ensure that the accommodations can be arranged.

Religious Holy Days

Religious holy days sometimes conflict with class and examination schedules. It is the policy of The University of Texas at Austin that you must give your instructors sufficient notification (at least 14 days) prior to the classes scheduled on dates you will be absent to observe a religious holy day.

Behavior Concerns Advice Line (BCAL)

If you are worried about someone who is acting differently, you may use the Behavior Concerns Advice Line to discuss by phone your concerns about another individual's behavior. This service is provided through a partnership among the Office of the Dean of Students, the Counseling and Mental Health Center (CMHC), the Employee Assistance Program (EAP), and The University of Texas Police Department (UTPD). Call 512-232-5050 or visit http://www.utexas.edu/safety/bcal.