

EDP s380C 4-Correlation and Regression Methods

Unique #74420, Summer 2017

TWTh 9:00-11:30am, SZB 435

Instructor

Dr. Lindsey Smith
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Instructor Office Hours

TA

TA Office Hours

Course Description

This course is designed for students to master correlation and regression techniques. The 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 EDP 380C 2-Fundamental Statistics or passed the proficiency exam. The instructor may approve equivalent graduate level courses.

Canvas: <https://utexas.instructure.com>

Announcements, course handouts, assignments, and grades will be posted on the course Canvas site. Assignments will be submitted via Canvas. It is your responsibility to ensure that your submissions are fully uploaded to Canvas by the deadline.

Note. Do not use the Canvas messaging system to communicate with the instructor. Communication outside of class and office hours should occur via email.

Required Textbook and Course Materials

- Warner, R. M. (2013). *Applied statistics: From bivariate through multivariate techniques* (2nd ed.). Los Angeles, CA: Sage.
- Calculator
During exams, classmates may not share calculators nor may a cell phone's calculator be utilized.
- SPSS
There are different versions of SPSS available and they might look somewhat different from the version demonstrated in class and the screenshots in the course handouts. As these versions change, please be flexible about the location of the relevant SPSS functions.
Access to SPSS:
 - Computer lab on campus
 - CoE Desktop
 - Purchase a license through the UT Campus Computer Store, UT Software Distribution and Sales, OnTheHub, etc.

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/Evaluations

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** (60 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. These assignments will not be accepted late.
2. **Portfolios** (2 @ 20 points each). There will be two short writing assignments 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. These assignments will not be accepted late.
3. **Exams** (2 @ 150 points each). There will be two in-class exams. Each exam will consist of conceptual, computational, and application questions. Students must bring a calculator to the exams. 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

Final grades will be assigned based on the percentage of accumulated points.

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

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 two-day 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.

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. 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

The University of Texas provides on request appropriate academic accommodations for qualified students with disabilities. At the beginning of the semester, students who need special accommodations should notify the instructor by presenting a letter prepared by the Service for Students with Disabilities (SSD) Office. For more information, contact Services for Students with Disabilities at (512) 471-6259 [voice], (866) 329-3986 [video phone], via e-mail at ssd@austin.utexas.edu, or visit: <http://ddce.utexas.edu/disability/>.

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>.

Use of Class Materials

The materials used in this class, including, but not limited to, exams and homework assignments are copyright protected works. Any unauthorized copying of the class materials is a violation of federal law and may result in disciplinary actions being taken against the student. Additionally, the sharing of class materials without the specific, express approval of the instructor may be a violation of the University's Student Honor Code and an act of academic dishonesty, which could result in further disciplinary action. This includes, among other things, uploading class materials to websites for the purpose of sharing those materials with other current or future students.

EDP 380C: 4-Correlation and Regression Methods – Summer 2017

A tentative schedule is presented below. You are responsible for hearing about any announced changes.

Homework and portfolio due dates will be announced in class.

Date	Day	Topic	Chapters/Sections
7/11/17	T	Course Introduction Statistics Review SPSS Basics	1-3, 5-6, 22.1-22.3, 22.5-22.7 4.3-4.6
7/12/17	W	Pearson Correlation	7, 4.6.4, 4.8.3, 4.10
7/13/17	Th	Pearson Correlation	7, 4.6.4, 4.8.3, 4.10
7/18/17	T	Pearson Correlation	7, 4.6.4, 4.8.3, 4.10
7/19/17	W	Pearson Correlation Other Measures of Association	7, 4.6.4, 4.8.3, 4.10 8.1-8.8, 8.10-8.11
7/20/17	Th	Other Measures of Association Bivariate Regression	8.1-8.8, 8.10-8.11 9, 12.3, 12.5
7/25/17	T	EXAM 1	
7/26/17	W	Bivariate Regression	9, 12.3, 12.5
7/27/17	Th	Bivariate Regression Correlations Between More Than Two Variables	9, 12.3, 12.5 10.1-10.5, 10.7-10.9, 11.4-11.5
8/1/17	T	Multiple Regression	11.1-11.3, 11.7-11.8, 11.11, 11.13-11.17, 12.4-12.5, 12.8-12.9, 12.11-12.12, 14.1-14.2, 14.4, 14.12-14.13, 14.15.1
8/2/17	W	Multiple Regression	11.1-11.3, 11.7-11.8, 11.11, 11.13-11.17, 12.4-12.5, 12.8-12.9, 12.11-12.12, 14.1-14.2, 14.4, 14.12-14.13, 14.15.1
8/3/17	Th	Patterns of Association Regression Assumptions	10.12.5 9.3, 11.6, 12.3, 14.3, 14.14
8/8/17	T	Coding Variables Mediation and Moderation	12.1-12.2, 12.7.1-12.7.2 10.13, 15, 16.1-16.11, 16.14-16.15
8/9/17	W	Mediation and Moderation	10.13, 15, 16.1-16.11, 16.14-16.15
8/10/17	Th	EXAM 2	