PSC 5913-491: Introduction to Analysis of Political and Administrative Data

Course Description:
This course is a graduate-level introduction to statistical analysis of political and administrative data. The central focus is descriptive, explanatory, and inferential statistics as they are used to address problems of public management and public affairs. The course is oriented toward utilization of quantitative procedures and interpretation of results, rather than to theoretical issues. The course is conducted entirely online.

Course Dates:
March 4 – 31, 2019
Last day to enroll or drop without penalty: February 3, 2019

Site Director:
This is a three-credit hour online course. Please see your local Site Director or email our online site coordinator at aponline@ou.edu

Professor Contact Information:
Course Professor: B. Mitchell Peck, PhD
Mailing Address: 780 Van Vleet Oval
Department of Sociology
University of Oklahoma
Norman, OK 73019
Telephone Number: (405) 325-1751
E-mail Address: bmpeck@ou.edu
Professor availability: The professor will be available via e-mail to students during the class dates.

Textbook(s) and Instructional Materials:
Student materials are available at the OU Bookstore Website at https://ou.textbookx.com/institutional/index.php. There is no longer a physical bookstore, the store will remain, but textbooks will not be stocked. The website has book selling, renting, buying, returning, and order tracking capabilities. If you need help with an order, or if you have any questions contact the toll-free phone at 1-(855)-790-6637, agents are available from 9a – 5p (EST) Monday – Friday. For more information or questions about textbooks, feel free to contact apsyllabi@ou.edu. Text prices are available online


2. Materials posted on the OU Canvas learning management system: Access Canvas at https://canvas.ou.edu, enter your OU NetID and password, and select course to access material. If you require assistance with Canvas, please click on the Help icon. You can search the Canvas guides, chat with Canvas support, or contact OU IT.
OU Email:
All official correspondence from instructors will be sent only to students’ ou.edu address.

Course Objectives:
This is an applied course on statistical analysis. Much of the in-class time will be spent solving problems relative to issues of public management and public affairs. Upon completion of the course, students should be able to:

1. understand statistical terminology;
2. understand the logic behind, and the interpretation of, the statistics discussed in class;
3. calculate and interpret commonly used statistics; and
4. use quantitative information in an informed manner, e.g., read the literature in the field or communicate with quantitative researchers.

Assignments, Grading, and Due Dates:
The course is divided into 4 main sections: (1) overview and foundations, (2) descriptive statistics, (3) bivariate statistics, and (4) inferential statistics. Each section is one week long.

Grades are based on four exams, one for each section. Each exam is worth 25% of the final grade. The exams are not cumulative per se, though the material in each section requires students to know the material from the previous sections. The exams will have multiple question types, including multiple choice, true/false and short answer questions, as well as hand calculation problems. Exams are open-book—students may use notes, handouts, books, or other materials. Students may not work with anyone else to complete the exams. Students must have a simple calculator to complete the exams.

The exams will be available at 8:00am (central time) on each Friday during the course. The exams are due online by 5:00pm (central time). Students must scan and submit the exams to the assignment dropbox on Canvas. Students must show and submit all calculations and other work.

Course Structure and Conduct:
The course is divided into 4 main sections (see above). Within each section, there are several topics. For each topic, there are assigned readings, course notes in the form of PowerPoint slides, exercises, and exercise answer keys. The assigned readings consist of the textbook and online readings (posted on Canvas). The exercises and exercise answer keys are posted on Canvas.

Students will read the assigned readings and course notes, complete the exercises and check answers with the answer keys. The exercises are not graded or submitted. The exercises are practice and preparation for the exams. At the end of each section, students will download the exam for that section, complete the exam, scan the exam, and submit the exam to the dropbox in Canvas.

Course Outline:
Section 1: Overview and Foundations (March 4 – March 10, 2019)

Topic 1 – The Research Process
Reading: Babbie Online, Chapter 1 and Chapter 2 and Online Lecture Notes
Exercise: Online

Topic 2 – Math Review
Reading: Online Lecture Notes
Exercise: Online

Reading: Text, Chapter 1 and Online Lecture Notes
Exercise: Online

Section 1 – Exam
Available: Friday March 8, 2019, 8:00am (central time)
Due: Sunday March 10, 2019, 5:00pm (central time)

Section 2: Descriptive Statistics (March 11 – March 17, 2019)

Topic 1 – Frequencies
Reading: Text, Chapter 2, pp. 25 – 38 and Online Lecture Notes
Exercise: Online

Topic 2 – Graphical Representations
Reading: Text, Chapter 2, pp. 42 – 56 and Online Lecture Notes
Exercise: Online

Topic 3 – Central Tendency
Reading: Text, Chapter 3 and Online Lecture Notes
Exercise: Online

Topic 4 – Variability
Reading: Text, Chapter 4 and Online Lecture Notes
Exercise: Online

Section 2 – Exam
Available: Friday March 15, 2019, 8:00am (central time)
Due: Sunday, March 17, 5:00pm (central time)

Section 3: Bivariate Statistics/Measures of Association (March 18 – March 24, 2019)

Topic 1 – Two-way Frequency (bivariate) Tables
Reading: Text, Chapter 2, pp. 38 – 42 and Online Lecture Notes
Exercise: Online

Topic 2 – Measures of Association for Nominal Variables (lambda)
Reading: Text, Chapter 9, pp. 250 – 255 and Online Lecture Notes
Exercise: Online

Topic 3 – Measures of Association for Ordinal Variables (gamma)
Reading: Text, Chapter 9, pp. 256 - 257 and Online Lecture Notes
Exercise: Online

Topic 4 – Measures of Association for Interval-Ratio Variables (correlation/regression)
Reading: Text, Chapter 11 and Online Lecture Notes
Exercise: Online

Section 3 – Exam
Available: Friday March 22, 2019, 8:00am (central time)
Due: Sunday, March 24, 5:00pm (central time)

Section 4: Inferential Statistics (March 25 – March 31, 2019)

Topic 1 – The Normal Distribution
Reading: Text, Chapter 5 and Online Lecture Notes
Exercise: Online

Topic 2 – Sampling and Sampling Distributions
Reading: Text, Chapter 6 and Online Lecture Notes
Exercise: Online

Topic 3 – Estimation (Confidence Intervals)
Reading: Text, Chapter 7 and Online Lecture Notes
Exercise: Online

Topic 4 – Hypothesis Testing (t-test)
Reading: Text, Chapter 8 and Online Lecture Notes
Exercise: Online

Section 4 – Exam

Available: Friday March 29, 2019, 8:00am (central time)
Due: Sunday, March 31, 5:00pm (central time)

Grading:
This is a letter-graded course: A, B, C, D, or F.

Notice: Failure to meet assignment due dates could result in a grade of I (Incomplete) and may adversely impact Tuition Assistance and/or Financial Aid.

Policy for Late Work:
Please contact the professor regarding his/her policy for late work

Attendance Policy:
In addition to interaction via Canvas and email contact, students are required to contact the instructor via email or telephone before the beginning of the course term for an initial briefing. Although physical class meetings are not part of this course, participation in all interactive, learning activities is required.

Student assignments and student/instructor communications will be conducted via Canvas, although students may contact the instructor via telephone, postal mail, email, or fax as needed

Incomplete Grade Policy:
A grade of “I” is not automatically assigned, but rather must be requested by the student by submitting to the instructor a “Petition for and Work to Remove an Incompleted Grade” form. An “I” can never be used in lieu of an “F” nor can an “I” be assigned because of excessive failure to participate in class activities.

Technical Support Information:
If you experience technical problems, contact Information Technology by visiting their website at: http://webapps.ou.edu/it/ or contacting them by telephone at: (405) 325-HELP (4357).
POLICIES AND NOTICES

Attendance/Grade Policy

Note: Attendance/absences do not apply to online courses. However, participation in all course activities is extremely important to student success in online courses.

Excused absences are given for professor mandated activities or legally required activities such as emergencies or military assignments. It is the policy of the University to excuse absences of students that result from religious observances and to provide without penalty for the rescheduling of examinations and additional required class work that may fall on religious holidays. Unavoidable personal emergencies, including (but not limited to) serious illness; delays in getting to class because of accidents, etc.; deaths and funerals, and hazardous road conditions will be excused.

If you are obtaining financial assistance (TA, STAP, FA, VA, Scholarship, etc.) to pay all or part of your tuition cost, you must follow your funding agency/institution’s policy regarding “I” (Incomplete) grades unless the timeline is longer than what the University policy allows then you must adhere to the University policy. Students who receive Financial Aid must resolve/complete any “I” (Incomplete) grades by the end of the term or he/she may be placed on “financial aid probation.” If the “I” grade is not resolved/completed by the end of the following term, the student’s Financial Aid may be suspended make the student ineligible for further Financial Aid.

Students are responsible for meeting the guidelines of Tuition Assistance and Veterans Assistance. See the education counselor at your local education center for a complete description of your TA or VA requirements.

Academic Integrity and Student Conduct

Academic integrity means honesty and responsibility in scholarship. Academic assignments exist to help students learn; grades exist to show how fully this goal is attained. Therefore all work and all grades should result from the student's own understanding and effort.

Academic misconduct is any act which improperly affects the evaluation of a student’s academic performance or achievement. Misconduct occurs when the student either knows or reasonably should know that the act constitutes misconduct. Academic misconduct includes: cheating and using unauthorized materials on examinations and other assignments; improper collaboration, submitting the same assignment for different classes (self-plagiarism); fabrication, forgery, alteration of documents, lying, etc….in order to obtain an academic advantage; assisting others in academic misconduct; attempting to commit academic misconduct; destruction of property, hacking, etc…; intimidation and interference with integrity process; and plagiarism. All students should review the Student’s Guide to Academic Integrity at http://integrity.ou.edu/students_guide.html

Students and faculty each have responsibility for maintaining an appropriate learning environment. All students should review policies regarding student conduct at http://studentconduct.ou.edu/

Accommodation Statement

The University of Oklahoma is committed to making its activities as accessible as possible. For accommodations on the basis of disability, please contact your local OU Site Director.

Adjustment for Pregnancy/Childbirth-Related Issues

Should you need modifications or adjustments to your course requirements because of documented pregnancy-related or childbirth-related issues, please contact me as soon as possible to discuss. Generally, modifications will be made where medically necessary and similar in scope to accommodations based on temporary disability. Please see http://www.ou.edu/content/eoo/faqs/pregnancy-faqs.html.
Title IX Resources
For any concerns regarding gender-based discrimination, sexual harassment, sexual misconduct, stalking, or intimate partner violence, the University offers a variety of resources, including advocates on-call 24/7, counseling services, mutual no-contact orders, scheduling adjustments, and disciplinary sanctions against the perpetrator. Please contact the Sexual Misconduct Office at smo@ou.edu or (405) 325-2215 (8-5), or the Sexual Assault Response Team at (405) 615-0013 (24/7) to report an incident. To learn more about Title IX, please visit the Institutional Equity Office’s website at http://www.ou.edu/content/eoo.html

Course Policies
Advanced Programs policy is to order books in paperback if available. Courses, dates, and professors are subject to change. Please check with your OU Site Director. Students should retain a copy of any assignments that are mailed to the professor for the course.

Any and all course materials, syllabus, lessons, lectures, etc. are the property of professor teaching the course and the Board of Regents of the University of Oklahoma and are protected under applicable copyright.

For more information about Advanced Programs, visit our website at: http://www.goou.ou.edu/
INSTRUCTOR VITA

B. Mitchell Peck

Education

- Ph.D. Sociology, Texas A&M University, College Station, Texas, 2002
- M.S. Sociology, Texas A&M University, College Station, Texas, 1990
- B.A. Sociology, Idaho State University, Pocatello, Idaho, 1987

Current Positions

- 2013-present Associate Professor, Department of Sociology, University of Oklahoma, Norman, Oklahoma
- 2012-present Affiliate Faculty, Center for Social Justice, The Women’s and Gender Studies’ Center, University of Oklahoma, Norman, Oklahoma
- 2005-present Adjunct Assistant Professor, Department of Health Administration and Policy, College of Public Health, University of Oklahoma Health Sciences Center, Oklahoma City, Oklahoma

Frequently Taught Advanced Programs Courses

- PSC5913 – Introduction to Analysis of Political and Administrative Data
- PSC5143 – Program Evaluation
- PSC5233 – Health Policy
- PSC5343 – Public Policy and Inequality

Major Areas of Teaching and Research Interest

- Teaching – Statistics, Research Methods, Inequality, Health and Medical Issues
- Research Interests – Health and Medicine, Public Policy

Representative Publications and Presentations