
Instructor: Dr. Jamie Smith
Class Time: 5:30-8:20
Class Location: 3104 Classroom Building

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Course Description

Presents an introduction to the foundations and use of quantitative methods in political science/public administration. Topics covered include: conducting systematic research in political science/public administration, measurement theory, bivariate analysis, hypothesis testing, and statistical inference.

Learning Objectives

By the end of this course students who have fully participated and read all course material should be able to:

1. Calculate and perform basic descriptive statistics
2. Formulate hypotheses and perform basic inferential statistics to test the hypotheses
3. Determine the appropriate statistical technique to address problems in a given situation
4. Analyze and interpret results from statistical analysis
5. Make managerial decisions based on statistical information
6. Use Statistical Software, particularly Excel (MS), for data analysis
7. Effectively visualize data

In addition to course material, we will concentrate on three other essential skills for those working (or, planning to work) in public and nonprofit organizations: teamwork, oral presentation skills, and written presentation skills.

Required Texts and Course Materials

There are two required texts for the course:

1. Berman, E.V., and Wang, X. (2012). *Essential Statistics for Public Managers and Policy Analysts*. Thousand Oaks: CQ Press. ISBN 10: 1608716775

2. Knaflic, C. N., (2015). *Storytelling with Data: a data visualization guide for business professionals*. Hoboken: John Wiley & Son. ISBN 10: 1119002257

Recommended: If you are absolutely dreading this course, *Statistics for People (who think) They Hate Statistics* presents an extremely simplified explanation of these concepts that aims to be humorous as well. It may make a good companion for those of you who are feeling terrified and overwhelmed by the idea of a semester of statistics.

Additional required reading material(s) may be indicated in the Course Schedule (below). All required reading material (with the exception of textbook material) is available on the course D2L site.

Access to **Excel** with the data analysis toolpak is necessary. This is available on all PC versions of the MS Suite (though the toolpak requires additional installation). However, the data analysis toolpak is only available on Mac for MS Office 2016. You can download MS Office 2016 through Office 365 with your OU email and password.

Assignments

Individual Participation

Active participation is one of the best and most reliable ways to demonstrate your understanding of ideas and concepts discussed in the readings and presented in class. My role (as the instructor for this course) is to provide you with a conceptual framework and to facilitate your learning. My role is not merely to deliver factual material to passive learners. The exercises and discussions in this course are intended to provide you with an opportunity to test your knowledge, formulate ideas and strategies, respond to strategic management dilemmas, and get feedback from peers. Therefore, weekly class attendance is necessary, but not sufficient for an excellent class participation grade.

Exams

There will be two exams in which you will be asked to apply the skills and concepts learned during that unit of the course. These exams may ask you to combine analytic skills/techniques, articulate findings, and incorporate those findings into a cohesive narrative. The exams will not be cumulative, though because skills and concepts build off one another an understanding of previous concepts will be necessary to complete both exams. Exams will be made available the Friday before the exam date. While we will not have a regular class session on the exam date, the room will be open to provide a quiet place to work and I will be there to answer questions. Exams will be due in the D2L dropbox at 11:59 pm on the specified day.

Homework

There will be a series of questions and/or exercises to reinforce material covered in class or readings. The purpose of these assignments is to build in the muscle memory of completing tasks often required during by jobs in the field of public administration. These may require written narratives, spreadsheet exercises, data visualization, and etc.

The assignments and applicable supplemental spreadsheets are available on D2L. While it is recommended that students complete the questions before the day the chapter is to be covered in class, the questions assigned in a given weekend are not due until 11:59 pm on the Friday immediately following a class session.

Paper

Working in groups, students will develop a research question on an important issue affecting public or nonprofit organizations. They will collect existing data (or with permission of the instructor design a survey or interview questionnaire, administer it to public or nonprofit-sector respondents). Using appropriate analytic techniques learned through the course, groups will test key hypothesis related to the chosen research question and write a paper based on their findings as well as some literature review. This project will involve numerous 15-30 minute in-class discussions (already incorporated by the instructor into the regular sessions) and a certain amount of out of class work and communication.

Outline of the paper

As a result of the work, detailed below, each group will write a paper that will:

1. clearly explain its objective and provide a motivation for the topic of your choice (1-2 pages¹);
2. provide a short review of the existing literature on the topic using research articles, government reports, and media accounts (2-3 pages);
3. describe the methodology of your study: data source(s) and collection method; and qualitative data analysis (1 page);
4. describe and scrutinize the findings of the analysis (5-8 pages);
5. Provide a conclusion for the study. Students will lift their vision from the factual findings and think about how their analysis is related to the broader public administration questions. Conclude by stating what you've learned in the project (less than 1 page).
6. include an appendix providing access to and information about the data used in the analysis;
7. include a bibliography with *at least* five (properly cited) external, academic sources.

Paper Format

The final document should be no more than 15 pages of single-spaced text—not including references, and appendices, if applicable—with no smaller than one-inch margins, and 12-point, non-condensed font. Aside from these basic requirements on structure, the group has a lot of freedom with the final appearance of the report—though the final report should have a polished and professional look.

In addition to the quality of your work and the conciseness of your document, you will also be evaluated on the thoroughness of your research. Please remember to cite all sources and to be consistent in the citation style that you choose to use (e.g. footnotes, endnotes, APA, MLA style, etc.). Presentation of tables and visuals should be placed near the relevant section of the paper, be well organized, and easily legible.

¹ Page lengths are estimates and may vary *slightly*

Presentation

Each group will have ample time during the final class session to present the major components of their research and analysis to their classmates, the instructor, and other recruited audience members. During the presentation, the group should highlight the key components of the paper outlined above using slides/visuals that facilitate audience understanding—that is to say with minimal and legible text and appropriate data visualizations.

Summary of Graded Assignments*

Outcome/Deliverable	Type	Description	Value
Participation	Individual		10%
Exams	Individual	Written Assignment	30% (2@15% Each)
Homework	Individual	Written Assignments and supporting materials	15%
Paper	Group	Written Assignment	25%
Presentation	Group		15%
Data Visualization Exercise	Individual	Infographic creation	5%

*The instructor reserves the right to add, remove, or reorder these assignments at her discretion and in accordance with university policy

**As a substantial part of the final grade for this course relies on group work, students will be given the opportunity to individually evaluate each group member's contribution to the final product after the assignment.

Helpful Data Websites

Selected Government Data and Reports Sites:

- United Nations: <http://unstats.un.org/unsd/default.htm> (see “Statistical databases)
- World Bank: <http://www.worldbank.org/> (See “Data”)
- Organization for Economic Cooperation and Development: <http://www.oecd.org/> (see “Statistics”)
- CIA World Fact Book: <https://www.cia.gov/library/publications/the-world-factbook/> (see “Download Publication”)
- Federal government portal: <http://www.usa.gov/Topics/Reference-Shelf/Data.shtml> (see “Featured Sites”. Also, Data.gov)
- Federal data: <http://www.fedstats.gov>
- U.S. Census: <http://www.census.gov> (see “Topic”, “Data”. Also, “American FactFinder” @ <http://factfinder2.census.gov/faces/nav/jsf/pages/index.xhtml>)
- National Center for Educational Statistics (<http://nces.ed.gov/>) [See also the IPEDS data for postsecondary education data <http://nces.ed.gov/ipeds/>]

Information and Reminders

Accommodation Policy

The University of Oklahoma is committed to providing reasonable accommodation for all students with disabilities. Students with disabilities who require accommodations in this course are requested to speak with the professor as early in the semester as possible. Students with disabilities must be registered with the Office of Disability Services prior to receiving accommodations in this course.

Religious Observance Policy

It is the policy of the University of Oklahoma 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. If class conflicts with a religious observance, please notify me at least 24 hours before the class in question so we may schedule appropriate make up assignments.

Internet Information

This course will make use of D2L. Internet access and access to this platform are required for success in the course. Slides, revisions to the syllabus, readings, announcements, changes to this syllabus, etc. can all be found in the appropriate folder on the D2L page for this course.

The primary means of communication for this course will be email. Be sure to check your OU-issued email regularly.

Due Dates and Late Assignments

All assignments are due in the D2L dropbox before the start of class. Late assignments will be accepted for four days after the due date with a late penalty assessed for each day, class or otherwise, that it is late. Illness, schedule conflicts, family problems, computer issues are not valid reasons for late assignments—plan and work ahead.

Make-up exams will be given only in extraordinary circumstances. Students are permitted to take a make-up exam only in the case of documented illness, death in the family, and approved university activity. Notification of missed exams must be received prior to the exam day.

Academic Integrity

Academic integrity means honesty and responsibility in scholarship. Professors have to obey rules of honest scholarship, and so do students. For more information about academic integrity, including a statement of what constitutes academic misconduct and plagiarism, see OU's "A Student's Guide to Academic Integrity" at <http://www.ou.edu/provost/integrity/>. When writing about, paraphrasing, or quoting the work of others, you must give proper attribution in the form of parenthetical citations and quotation marks around directly quoted phrases or sentences. Using work in this class that you have completed for another class is plagiarism. Ignorance is not an acceptable excuse for plagiarism. Any work not resulting from the student's own efforts will

result in a grade of 0 and be turned in to the property authorities. This includes plagiarized papers, copied assignments, cheating on exams, or any other dishonest activity.

Course Schedule*

Date	Topic	Readings	Assignments**
8/22	Syllabus Basics of Research Design	Berman and Wang Chapter 2	
8/29	Conceptualization and Data Collection	Berman and Wang Chapters 3 and 5	Homework 1
9/5	Labor Day		
9/12	Central Tendency and Dispersion	Herman and Wang Chapters 6 and 7	Homework 2; Paper Topic
9/19	Contingency Tables	Berman and Wang Chapter 8	Homework 3
9/26	Exam 1		
10/3	Chi-Square	Berman and Wang Chapter 10	Homework 4
10/17	Measures of Association	Berman and Wang Chapter 11	Homework 5
10/24	The T-Test and ANOVA	Berman and Wang Chapters 12 and 13	Homework 6
10/31	Simple Regression	Berman and Wang Chapter 14	Homework 7
11/7	Multiple Regression	Berman and Wang Chapter 15	Homework 8
11/14	Exam 2		
11/21	Data Visualization I	Knaflic Chapters 1- 4	
11/28	Data Visualization II	Knaflic Chapters 5 - 8	Data Visualization Exercise
12/5	Final Presentations		Presentation Materials
12/10			Final Report

*The Instructor reserves the right to add to, remove, or reorder these assignments as she sees fit and in accordance with university policy.

**All assignments are due by 11:59PM on the Friday following class, with the exception of exams which are due by 11:59PM on the assigned day.