**Data Analysis**

**POLS 3000-001, Fall (2018)**

**MWF 9:05 am - 10:00 am**

**Matthews-Daniel 203**

**Professor:** Ronald J. McGauvran

**Office Hours:** D/D time-time,

 (Or by Appointment)

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**Course Description:** This class covers the ‘science’ of political science. Political scientists frequently use quantitative methods to study such things as elections, legislatures, wars, trade, protest behavior, and other important political phenomena. This course provides students with an introduction to fundamental concepts in statistical analysis, research design, and causal inference as well as contemporary examples of how those concepts can be applied in the real world. The goal is to enable students to not only become sophisticated consumers of quantitative research in political science but to enable them to conduct their own research using computerized data and software and to effectively present the results to others using tools and ideas from the course. Students will learn the relevance of data analysis to political science, how to understand and calculate statistics mathematically, and how to obtain them using SPSS.

**Required Text:**

* Marchant-Shapiro, Theresa. 2016. *Statistics for Political Analysis.* Los Angeles, CA: Sage CQ Press. ISBN: 9781452258652

**Learning Objectives:**

* Understand how descriptive statistics can be used to describe political phenomena.
* Differentiate descriptive statistics from inferential statistics.
* Clearly display descriptive information through the use of tables and graphs.
* Understand the roll of statistics in testing hypotheses about politics.
* Identify some major limitations of statistical analysis in testing hypotheses related to politics and understand the roll of theory in hypothesis testing.
* Use a statistical software package such as SPSS to analyze political data.
* Develop and test social-scientific hypotheses regarding relationships between variables.
* Critically evaluate contemporary social-scientific research that makes use of quantitative data analysis.

**Course Requirements:** Students are responsible for all the material in the readings and discussed in lectures. This includes both readings from the required texts (which will be furthermore referred to as S4PA) as well as additional assigned readings. All assigned readings, excluding S4PA, will come from either peer-reviewed research articles or textbooks published by university presses. It is extremely important that each student attends class, as some material needed for exams and papers will only be covered during the class periods. Additional materials may be posted as circumstances arise.

Meeting with Professor (10 Points): At the beginning of the semester you will schedule an approximately 20 minute meeting with the professor to discuss your political science interest. This meeting will be focused on producing a testable hypothesis that you will work on throughout the semester.

Homework (6 Points each, 30 Points total): Throughout the semester you will be responsible for completing 5 homework assignments. The homework assignments will be a mix of analytical and statistical problems, and will be available through iLearn. If you have any issues with submission you should contact the professor ASAP (this means after the first one, not the day before the end of the semester). The homework assignments are due by 11:59pm on the day scheduled on the syllabus. No late assignments will be accepted.

Research Paper (25 Points): You are required to write a research paper presenting an original research idea of your own choice. This paper will be broken into 2 parts, a front end and a back end, although it will a single project. The research paper will assess a causal relationship between two phenomena, at least one of them political. The front end will be a condensed introduction and literature review of the topic that you haven chosen to study. The back end will include a detailed description of the data that you will use, including the measurement and collection, as well as a description of the methodology used to study said relationship. The back end will also include a detailed discussion of your analysis and interpretation of your findings, as well as a conclusion. Throughout the semester, you should be independently reading the literature on this topic, to help guide your research.

Poster Presentation (15 Points): You will create and present the results of your research project with a research poster. You will present the poster during a poster presentation session in which all political science undergraduates and faculty will be invited. Prior to the poster presentation you will be assigned a fellow students poster to peer-review. More details to follow.

Final Exam (20 Points): There is a final exam in this class. The exam will be “take home” and you will have at least 48 hours to complete it. The exam will be available through iLearn, and you will submit it through iLearn. All work must be your own, and any sign of work that it not solely your own will lead to an exam grade of zero. This exam will include objective (multiple choice, true false, and math) questions, subjective short answer questions, as well as methodological questions that will require you to do computer aided analysis with SPSS. Dates for the exam will be posted later in the semester. This exam may be re-scheduled only in the most extreme circumstances, and make-ups will be given on a case-by-case basis.

**Grading Policy:** Final letter grades will be assigned according to the following schedule: 90points+ is an A, 80-89points is a B, 70-79 points is a C, 60-69 points is a D, and less than 60 points is an F.

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| **Assignment** | **Points** |
| Meeting With Instructor | 10 |
| Homework | Homework #1 | 6 |
| Homework #2 | 6 |
| Homework #3 | 6 |
| Homework #4 | 6 |
| Homework #5 | 6 |
| Research Paper | Front End | 5 |
| Back End | 20 |
| Poster Project | Poster Presentation | 10 |
| Peer Review | 5 |
| Final Exam | 20 |
| **Total:** | **100** |

Grades will neither be rounded up nor will they be rounded down. The policy on late work is specific to the assignment type; please see above for specifics. There will be no work accepted later than 11:59pm on the last Friday of regular classes.

**Extra Credit:** There are bound to be opportunities to receive extra credit throughout the semester. These opportunities will be completely on the whim of the professor and will not be granted upon asking.

**Attendance and Participation:** Attendance will not be taken in this course, but all students are expected to attend. Students who are not present are solely responsible for finding out what material was covered and information about assignments. Not attending is no excuse for making up late work or exams. Make-up assignments and exams may be given on a case-by-case basis determined by the instructor. In order to be eligible to take a make-up exam or to make-up a class assignment, the absence must be a university-sponsored absence or an emergency (with documentation).

**Electronic Devices:** Cellphones, tablets, and laptop computers are ubiquitous on college campuses. Although this is understandably asking a lot, it is strongly advised that students use classroom time for classroom objectives. Please just be respectful citizens and do not let device use distract others.

**Classroom Decorum:** A university setting is a fertile ground for the exchange of ideas. Students are certainly encouraged to express their thoughts relevant to this class. However, students must do so in a respectful manner. If a student is unable to conduct him or herself in a means that is conducive to a learning atmosphere, that student will be removed from class. This includes demonstrating respect for fellow students, as well as for the Professor. For example, it is unacceptable to come to class late, leave class early, sleep during class, or surf the internet during class.

**Email Etiquette:** Email is the preferred means of communication for the Professor. When a student emails the Professor they need to follow some basic rules. First, insert the course title and number into the subject line of the message. Second, plainly identify who the sender is and articulate the content of the message clearly. This means that text message or instant message speak should not be used. Finally, before emailing the professor, the student should review the syllabus. It is very likely that the answers to the students question(s) can be found by simply examining this syllabus. You can prove to me that you have read the syllabus by sending me an email titled, “Escapade.” In that email, copy and paste the lyrics to “Escapade” from *Janet Jackson’s Rhythm Nation 1814* and send me a YouTube link for the music video so that I may enjoy it. You will receive 2 points of extra credit for this exercise if you do this by 9am (my email time) Friday December 7th, 2018. Failure to follow these simple rules will generally result in a non-response from the target of the email communication.

**Academic Integrity:** Maintaining high standards of academic integrity in every class at Tennessee Tech is critical to the reputation of Tennessee Tech, its students, alumni, and the employers of Tennessee Tech graduates. The Student Academic Misconduct Policy describes the definitions of academic misconduct and policies and procedures for addressing Academic Misconduct at Tennessee Tech. For details, view the Tennessee Tech's Policy 217 – Student Academic Misconduct at [Policy Central](https://tntech.policytech.com/?auto=false)

**Disability Accommodations:** Students with a disability requiring accommodations should contact the Office of Disability Services (ODS). An Accommodation Request (AR) should be completed as soon as possible, preferably by the end of the first week of the course. The ODS is located in the Roaden University Center, Room 112; phone 372-6119. For details, view the Tennessee Tech’s Policy 340 – Services for Students with Disabilities at Policy Central.

**Sexual Discrimination, Harassment, & Assault**: TTU is committed to providing an environment free of all forms of discrimination and sexual harassment, including sexual assault, domestic violence, dating violence, and stalking. If you (or someone you know) has experienced or experiences any of these acts of aggression, please know that you are not alone. The federal Title IX law makes it clear that violence and harassment based on sex and gender are Civil Rights offenses. TTU has staff members trained to support you in navigating campus life, accessing health and counseling services, providing academic and housing accommodations, helping with legal protective orders, and more.

**Course Evaluations:** Each student will have an opportunity to evaluate this class at the end of the semester.

**Revision to Syllabus:** The Professor reserve the right to amend, change, discard, or lampoon any or all of this syllabus at any time during the semester as they see fit. Until such point that the professor sees fit to change any section of this syllabus, its word is law, and will remain the guiding document of his class. Any or all spelling, grammatical, logical, or pedagogical mistakes contain within these pages are the sole fault of the public school system of the state of Oregon, from whom the professor received a free education. If a student has any comments or concerns regarding this syllabus, feel free to write them on the back of a mint condition Action Comics #1 and send to Ronald J McGauvran, Department of Sociology and Political Science, Tennessee Tech University, 720 Quadrangle, Cookeville, TN 38505.