Introduction to Political Analysis PS 372:001 Fall 2019

Course Time: TR 12:30-1:45pm Location: LAW 395 (we'll meet in LAW 397 on 10/24/19, but 395 otherwise). Instructor: Dr. Clayton Thyne Office: 1621 or 1625 Patterson Office Tower Office Hours: TR 2-3:30pm (or by appointment)¹ Email: <u>clayton.thyne@uky.edu</u> Other contacts: 859-257-6958 (office); 859-396-6871 (text/cell); clayton.thyne (skype)

COURSE SUMMARY

This course is designed to introduce students to the skills for interpreting, conducting, presenting, and analyzing political science statistical research. Over the course of the term, you will learn how to think like social scientists while developing various skills required by the discipline: how to choose which method to employ, how to undertake original research (complete with data collection and analysis), and how to present your findings to colleagues. The goal at the end of this class is to help you understand and conduct quantitative political research that will be useful in both academic and professional settings.

COURSE OBJECTIVES

On successful completion of this course, you will be able to:

- Describe and assess the logic of political science research in particular and of scientific research in general;
- Comprehend the basic concepts, steps, and design involved in the systematic research process;
- Learn how to analyze data, communicate research findings and be an intelligent consumer of research.

Course instructional methods

The course will be taught using multiple instructional methods. These methods will include lecture, group discussion/work, and time to work through problems in class. It will be critical for students to attend all sessions to assure mastery of course content. Much material for the course, including powerpoint slides and review lectures, is available on the Canvas website.

Course required text and materials

¹ "By appointment" is really your best bet. I'll always be around during office hours. However, as chair of the department, things frequently come up. To save yourself some time waiting around, it's best to just set something up via email in advance.

Thyne, Clayton L. 2019. *Political Analysis for the Rest of Us: An Accessible Take on the Science of Political Science*, volume 2 (Van-Griner Publishing, Cincinnati, OH).²

Note that this textbook must be purchased directly from the publisher. This saves you money. You can order it at: <u>https://store.van-griner.com/catalog/political-science</u>

EARNING GRADES

You will be graded in three ways. The first is a set of assignments that follow each of the twelve chapters. The purpose of these assignments is to make sure that you are keeping up with the readings and learning the material. They are meant to be easy for those who are putting in the required time and effort. The second set of assessments comes from a midterm and final examination. The final is not cumulative. Third, you will be graded on attendance and participation.

I will calculate your final grade based on the following:

Chapter Assignments (48% of total)

Assignment 1, chapter 1: 4% of total grade Assignment 2, chapter 2: 4% of total grade Assignment 3, chapter 3: 4% of total grade Assignment 4, chapter 4: 4% of total grade Assignment 5, chapter 5: 4% of total grade Assignment 6, chapter 6: 4% of total grade Assignment 7, chapter 7: 4% of total grade Assignment 8, chapter 8: 4% of total grade Assignment 9, chapter 9: 4% of total grade Assignment 10, chapter 10: 4% of total grade Assignment 11, chapter 11: 4% of total grade

Exams (40% of total)

There will be two exams – a midterm and a final. Each will be a combination of short answer, T/F, multiple choice, and problems sets. The exams are designed to test your familiarity with the lecture material, reading assignments, and your independent ability to apply what you have learned.

Midterm exam; covers chapters 1-6; 20% of total grade Final exam; covers chapters 7-12; 20% of total grade

² Please note that no royalties from the selling of this book to UK students are distributed directly to the author. Rather, royalties are processed directly from the publisher to a UK account that is used to support university priorities, which include research, undergraduate and graduate student learning, diversity and inclusivity, and engagement with the public.

Attendance and Participation (12% total)

The final part of your grade will be based on your attendance and participation. You will lose 20% of this grade for each unexcused absence (i.e., if you miss 5 sessions, the best you can do in the course is a B). You must do more than simply attend the sessions to receive your attendance/participation grade. I expect regular participation and will count you as absent if you regularly fail to participate.

Final course grades will be based on the following scale:

A = 90-100B = 80-89C = 70-79D = 60-69E = below 60

Midterm grades will be posted by 10/28 and will be based on the grading criteria in the syllabus.

ABSENCES

Students need to notify the professor of absences prior to class when possible. *Senate Rules 5.2.4.2* defines the following as acceptable reasons for excused absences: (a) serious illness, (b) illness or death of family member, (c) University-related trips, (d) major religious holidays, and (e) other circumstances found to fit "reasonable cause for nonattendance" by the professor.

Students anticipating an absence for a major religious holiday are responsible for notifying the instructor in writing of anticipated absences due to their observance of such holidays no later than the last day in the semester to add a class. Two weeks prior to the absence is reasonable, but should not be given any later. Information regarding major religious holidays may be obtained through the Ombud (859-257-3737,

http://www.uky.edu/Ombud/ForStudents_ExcusedAbsences.php).

Students are expected to withdraw from the class if more than 20% of the classes scheduled for the semester are missed (excused) per University policy.

Per *Senate Rule 5.2.4.2*, students missing any graded work due to an excused absence are responsible: for informing the Instructor of Record about their excused absence within one week following the period of the excused absence (except where prior notification is required); and for making up the missed work. The professor must give the student an opportunity to make up the work and/or the exams missed due to an excused absence, and shall do so, if feasible, during the semester in which the absence occurred.

Verification of Absences

Students may be asked to verify their absences in order for them to be considered excused. *Senate Rule 5.2.4.2* states that faculty have the right to request "appropriate verification" when students claim an excused absence because of illness, or death in the family. Appropriate

notification of absences due to University-related trips is required prior to the absence when feasible and in no case more than one week after the absence.

MISSED QUIZZES AND ASSIGNMENTS

Make-up quizzes/assignments will only be given for documented excused absences as defined by the University (Senate Rule V.2.4.2) and are scheduled as needed. A missed quiz/assignment will result in a score of zero for that exam, unless an acceptable written excuse is presented within 48 hours of the missed examination.

ACADEMIC INTEGRITY

Per University policy, students shall not plagiarize, cheat, or falsify or misuse academic records. Students are expected to adhere to University policy on cheating and plagiarism in all courses. The minimum penalty for a first offense is a zero on the assignment on which the offense occurred. If the offense is considered severe or the student has other academic offenses on their record, more serious penalties, up to suspension from the University may be imposed.

Plagiarism and cheating are serious breaches of academic conduct. Each student is advised to become familiar with the various forms of academic dishonesty as explained in the Code of Student Rights and Responsibilities. Complete information can be found at the following website: <u>http://www.uky.edu/Ombud</u>. A plea of ignorance is not acceptable as a defense against the charge of academic dishonesty. It is important that you review this information as all ideas borrowed from others need to be properly credited.

Senate Rules 6.3.1 (see <u>http://www.uky.edu/Faculty/Senate/</u> for the current set of Senate Rules) states that all academic work, written or otherwise, submitted by students to their instructors or other academic supervisors, is expected to be the result of their own thought, research, or self-expression. In cases where students feel unsure about a question of plagiarism involving their work, they are obliged to consult their instructors on the matter before submission.

When students submit work purporting to be their own, but which in any way borrows ideas, organization, wording, or content from another source without appropriate acknowledgment of the fact, the students are guilty of plagiarism.

Plagiarism includes reproducing someone else's work (including, but not limited to a published article, a book, a website, computer code, or a paper from a friend) without clear attribution. Plagiarism also includes the practice of employing or allowing another person to alter or revise the work, which a student submits as his/her own, whoever that other person may be. Students may discuss assignments among themselves or with an instructor or tutor, but when the actual work is done, it must be done by the student, and the student alone.

When a student's assignment involves research in outside sources or information, the student must carefully acknowledge exactly what, where and how he/she has employed them. If the words of someone else are used, the student must put quotation marks around the passage in question and add an appropriate indication of its origin. Making simple changes while leaving

the organization, content, and phraseology intact is plagiaristic. However, nothing in these Rules shall apply to those ideas, which are so generally and freely circulated as to be a part of the public domain.

Please note: Any assignment you turn in may be submitted to an electronic database to check for plagiarism.

STUDENT CONDUCT

Students are expected to maintain decorum that includes respect for other students and the professor, to regularly log in to the course, and to display an attitude that seeks to take full advantage of the educational opportunity. All students are expected to be prepared to work and actively participate in class activities.

ACCOMODATIONS DUE TO DISABILITY

If you have a documented disability that requires academic accommodations, please see me as soon as possible during scheduled office hours. In order to receive accommodations in this course, you must provide me with a Letter of Accommodation from the Disability Resource Center (DRC). The DRC coordinates campus disability services available to students with disabilities. It is located on the corner of Rose Street and Huguelet Drive in the Multidisciplinary Science Building, Suite 407. You can reach them via phone at (859) 257-2754 and via email at drc@uky.edu. Their web address is

http://www.uky.edu/StudentAffairs/DisabilityResourceCenter/.

CLASSROOM EXPECTATIONS

I expect all students to behave professionally in this class. If you miss a class you are still responsible for the information covered. The instructor will not provide you with notes. I expect all students who attend class to arrive on time and ready to start class. It is disrespectful to the instructor and your classmates to show up late or leave early. During class please refrain from all disruptive behavior, including (but not limited to) reading newspapers, sleeping, talking during lecture, cell phone and pager use, and insulting classmate or instructors.

Please be aware that the instructor's pet peeve is students packing up their stuff before class ends. I will never keep you late for class because it is rude to assume that my lecture is more important than your time. Likewise, I will consider it rude if you assume that packing up your items is more important than my lecture. In regards to cell phones, it is absolutely rude to text or talk on the phone during class. That being said, I understand that you have lives and issues that may require immediate attention (as do I). If something important arises, please simply remove yourself from class momentarily and take care of the issue.

CANVAS

This course utilizes Canvas for essentially all facets of the course (quizzes, exams, readings, videos). You are expected to check Canvas regularly for all information pertaining to this course.

Session/Date(s)	Торіс	Preparation (prior to class)	Graded Assignment	Web Resources (optional, but highly recommended)
Week 1, 08/27 (no class on 08/29)	Ch1: The Science of Political Science	Purchase textbook; read Ch1		 "What is Science?" <u>https://www.youtube.com/watch?v=hDQ8ggroeE4</u> "Introduction to Political Science" <u>https://www.youtube.com/watch?v=jQK0Xbfel-M</u>
Week 2, 09/03, 09/05	Ch2: Political Science and the Scientific Process	Read Ch2	Ch1 assignment due at the beginning of class on 09/03	 "How to develop a good research topic" <u>https://www.youtube.com/watch?v=nXNztCLYgxc</u> "How to do a literature review using Google Scholar" <u>https://www.youtube.com/watch?v=8ydzerd9FT0</u> "Theories in Political Science" <u>https://www.youtube.com/watch?v=EqAZZvfFVdY</u> "Intro to Hypothesis Testing in Statistics" <u>https://www.youtube.com/watch?v=VK-rnA3-41c</u>
Week 3, 09/10, 09/12	Ch3: Measurement	Read Ch3	Ch2 assignment due at the beginning of class on 09/10	 "The Political Spectrum Explained in 4 Minutes" <u>https://www.youtube.com/watch?v=JlQ5fGECmsA</u> "Reliability & Validity" <u>https://www.youtube.com/watch?v=9ltvDNAsO-I&t=51s</u> "Levels of Analysis" <u>https://www.youtube.com/watch?v=WyggsLAGDc4</u> "Types of Data: Nominal, Ordinal, Interval/Ratio – Statistics Help" <u>https://www.youtube.com/watch?v=hZxnzfnt5v8</u>
Week 4, 09/17, 09/19	Ch4: Operationalizing Concepts	Read Ch4	Ch3 assignment due at the beginning of class on 09/17	 "Using Secondary Data In Your Research" <u>https://www.youtube.com/watch?v=DPDTZMm911Y</u> "Collecting Data" <u>https://www.youtube.com/watch?v=kuyt0u_tFi4</u> "Research Strategy: Experiment" <u>https://www.youtube.com/watch?v=fMSA48fi6yc</u> "Internal versus External Validity" <u>https://www.youtube.com/watch?v=RNsal_KrIpo</u> "Selection Bias: A Real World Example" <u>https://www.youtube.com/watch?v=52Nep7CBdQ</u> "Sampling: Simple Random, Convenience, systematic, cluster, stratified" <u>https://www.youtube.com/watch?v=be9e-Q-jC-0</u>
Week 5, 09/24, 09/26	Ch5: Describing Your Data	Read Ch5	Ch4 assignment due at the beginning of class on 09/24	 "What is Central Tendency" <u>https://www.youtube.com/watch?v=AdH5vfobH5E</u> "Normal Distributions, Standard Deviations, Modality, Skewness and Kurtosis: Understanding concepts" <u>https://www.youtube.com/watch?v=HnMGKsupF8Q</u> "Standard Deviation" <u>https://www.youtube.com/watch?v=09kiX3p5Vek</u>

				 "The Standard Deviation (and Variance) Explained in One Minute: From Concept to Definition & Formulas" <u>https://www.youtube.com/watch?v=gpKEfVZIPj4</u> "Parameters v Statistics" <u>https://www.youtube.com/watch?v=UaiMKPNS0L4</u> "Understanding Confidence Intervals: Statistics Help" <u>https://www.youtube.com/watch?v=tFWsuO9f74o</u> "Confidence intervals and margin of error" <u>https://www.youtube.com/watch?v=hlM7zdf7zwU</u>
Week 6, 10/01, 10/03	Ch6: Describing Data Visually	Read Ch6	Ch5 assignment due at the beginning of class on 10/01	 "Bar Graphs and Pie Charts" <u>https://www.youtube.com/watch?v=YgvdxkP7aCo</u> "Histograms and Stem & Leaf Plots" <u>https://www.youtube.com/watch?v=2uk-qRKWJj4</u> "Statistics – Making a scatter plot" <u>https://www.youtube.com/watch?v=NcgRa0uotXs</u> "How to create figures in Excel" <u>https://www.youtube.com/watch?v=DjDaNnlYT3s</u>
Week 7, 10/08, 10/10	Ch7: The Basics of Hypothesis Testing	Study for Midterm Exam (for 10/08); read Ch7 (for 10/10)	Midterm exam covering Ch1-6 on 10/08; Ch6 assignment due at the beginning of class on 10/08	 "Null and Alternate Hypothesis – Statistical Hypothesis Testing – Statistics Course" <u>https://www.youtube.com/watch?v=_Qlxt0HmuOo</u> "Type I error vs Type II Error" <u>https://www.youtube.com/watch?v=a_1991xUAOU</u> "Normal Distribution & Z-scores" <u>https://www.youtube.com/watch?v=mai23vW8uFM</u> "using a z-score table" <u>https://www.youtube.com/watch?v=85G_PLBTX00</u>
Week 8, 10/15, 10/17	Ch8: Finding Differences in Two Means or Proportions	Read Ch8	Ch7 assignment due at the beginning of class on 10/17 (this is a Th, which gives you a bit more time than usual)	 "Testing Differences Between Means Using Excel" <u>https://www.youtube.com/watch?v=TpD4hD3NeWo</u> "z-test vs. t-test" <u>https://www.youtube.com/watch?v=YsalXF5POtY</u> "Introduction to the t Distribution (non-technical)" <u>https://www.youtube.com/watch?v=Uv6nGIgZMVw</u> "Confidence Interval Two Population Proportions" <u>https://www.youtube.com/watch?v=Lu9olYXnoSQ</u>
Week 9, 10/24 (no class on 10/22)	Ch8 continued			
Week 10, 10/29, 10/31	Ch9: Nominal- level Relationships	Read Ch9	Ch8 assignment due at the beginning of class on 10/29	 "Cross tabs, chi2 and hypothesis testing Part I" <u>https://www.youtube.com/watch?v=i79uxRz7tLM</u> "Chi-squared Test" https://www.youtube.com/watch?v=WXPBoFDqNVk

				"Cramer's V: Calculation and Interpretation" <u>https://www.youtube.com/watch?v=BROyKPwsxKs</u>
				• "Lambda" <u>https://www.youtube.com/watch?v=Q6LKhn2zv7M&t=30s</u>
Week 11, 11/05, 11/07	Ch9 continued			
Week 12, 11/12, 11/14	Ch10: Ordinal- and Continuous- Level Relationships	Read Ch10	Ch9 assignment due at the beginning of class on 11/12	 "Kendall's tau – Explained Simply + Examples (part 1)" <u>https://www.youtube.com/watch?v=oXVxaSoY94k&list=PLjsHs5Evjqv</u> <u>UPsDaOyGF2 c_u2vm2LTmk</u> "Math Tutorial: Pearson's correlation coefficient (statistics)" <u>https://www.youtube.com/watch?v=372iaWfH-Dg</u> "Correlation Formula – Intro to Statistics" <u>https://www.youtube.com/watch?v=8RRYb-hgBRw</u>
Week 13, 11/19, 11/21	Ch10 continued		Ch10 assignment due at end of class on 11/21	
Week 14, 11/26 (no class on 11/28)	Thanksgiving (flex session)			
Week 15, 12/02, 12/05	Ch11: The Logic and Practice of Control	Read Ch11		 "Lecture 6: Spurious, Additive, and Interactive Relationships" <u>https://www.youtube.com/watch?v=qZqTKz-Bj3c</u> "Complex Experiments: 3 – Main effects and interactions" <u>https://www.youtube.com/watch?v=1o4CO2mBmgU</u> "Calling Bullshit 3.3: Spurious Correlations" <u>https://www.youtube.com/watch?v=WNsLcg2GQMY</u>
Week 16, 12/10, 12/12	Ch12: Reading Published Work	Read Ch12	Ch11 assignment due at the beginning of class on 12/10; Ch12 assignment due on Friday, 12/13 by 5pm	 "Basic Elements of a Regression Table: Causal Inference Bootcamp" <u>https://www.youtube.com/watch?v=o5nNOsawCPA</u> "Understanding Regression Analysis" <u>https://www.youtube.com/watch?v=JPjW2HPTaEw</u>
Final exam week		Study for Final Exam	Final exam covering Ch7-12 on 12/19 at 10:30am	