TEXAS A&M UNIVERSITY COMMERCE

COURSE SYLLABUS
FALL 2020
PSCI 540 01W
DATA ANALYSIS

Professor: Dr. Jangsup Choi
Office Location: Social Science Building 161
University Email Address: Jangsup.Choi@tamuc.edu

Online Course Time Zone: U.S. Central Time

COURSE INFORMATION

Materials – Textbooks, Readings, Supplementary Readings

Textbook(s) Required
Johnson, Janet Buttolph, Henry T. Reynolds, and Jason D. Mycoff. 2019. *Political Science Research Methods*. CQPress (ISBN: 978-1544331430).

Textbook Readings. Given the vast amount of information available in the course, we will not have enough time to "cover" all of the readings in the assigned book—chapter by chapter. Consequently, this course will depend on you to **complete all assigned readings** and be prepared to discuss them in online class in a timely manner. Please note that all assigned readings are critically important for successfully completing exams and class activities.

Course Description

Very often a solution turns on some means of quantifying phenomena or states that have hitherto been assessed in terms of "rather more," "rather less," or "a lot of" or - sturdiest workhorse of scientific literature - "marked" ("The injection elicited a marked reaction"). Quantification as such has no merit except insofar as it helps to solve problems. To quantify is not to be a scientist, but goodness, it does help.

- P.B. Medawar, Advice to a Young Scientist

Students will be introduced to introductory empirical and statistical methods in political science. Students will focus on applied methods of sampling, probability, descriptive and inferential statistics, and hypothesis testing for application to political science and social science research.

The specific purpose of this course is to introduce students to the use of statistics in political science research. Statistical topics to be covered in this class begin with what we refer to as descriptive statistics where students are introduced to such things as measure of central tendency, measures of dispersion, and the normal curve. We will then proceed to what is known as inferential statistics which include such things as probability and hypothesis testing. We will turn next to measures of association, first, associations between two variables and then associations using what we call multivariate measures. As part of the statistical training offered in this course, students will use the statistical package known as SPSS. However, the course does not require advanced mathematical skills (i.e., above the ninth grade level) or any prior knowledge of the computer.

Student Learning Outcomes

Upon completion of this course

1. Describe the role of statistics in social science research and demonstrate how to create testable hypotheses.
2. Calculate and describe the different measures of central tendency and measures of dispersion.
3. Demonstrate the ability to make comparisons between groups and correctly analyze relationships between categorical variables.
4. Demonstrate knowledge of the appropriate methods, technologies, and data that social and behavioral scientists use to make an inference.
5. Demonstrate the ability to conduct research and analyze data resulting in a research paper containing a literature review, appropriate hypotheses, and empirical results.

COURSE REQUIREMENTS

Instructional / Methods / Activities Assessments

All students are expected to comply with the following requirements.

1. Complete all course readings for each module of the course.
2. Regularly check the course site for announcement and updates.
3. Complete assigned readings.
4. Take each of the scheduled exams.
5. Participate fully in the class discussion.
6. Complete class activities.
7. Write a research design.
8. Students will respect their fellow classmates and the instructor. This includes treating everyone with courtesy and respect in any and all correspondence for the course. For more information on this subject, please see the Student Guidebook.
9. All students will maintain the highest level of personal responsibility and academic honesty. Academic dishonesty affects all individuals at the University and accordingly will not be tolerated. For this class, academic dishonesty includes cheating, plagiarism, collusion and/or falsifying academic work. In particular, passing off work as your own that was written by someone else, without proper citation or attribution, on either exams or discussion assignments will be considered an act of plagiarism. This holds true whether material comes from the textbook, another publication, an internet source, or another student. Violations of academic integrity/honesty while carrying out academic assignments may, at the discretion of the instructor, receive a zero on the particular work in question, receive an "F" in the course and may result in significant administrative penalties.
10. Students will comply with any and all D2L technical requirements in terms of training, computer access, & Internet access.
11. Failure to complete two of any discussion, assignment, or activity will be considered "excessive" absenteeism and the student will be administratively dropped from the class.

GRADING

This course occurs in a digital learning environment designed in module format. Each module runs around two weeks during which time you will be expected to read assigned material, participate in discussions, complete class activities, and take exams. Each module opens and closes on a certain date and once a module closes it will not be opened again. Therefore you need to demonstrate a level of time management that allows you to meet deadlines as posted.

Exams: 150 Points (30% of total course grade)
Exam Format
There will be two exams. The exams will cover material from the assigned readings and class discussion.

Exam Times and Dates
Exams will be taken online and are scheduled on the dates listed below. The exam will begin at **11:30 PM on Saturday** and will close 72 hours later at **11:30 PM on Tuesday**.

Technical Issues: Students will take exams via the course page. Students are responsible for testing the compatibility of their own computers and software prior to starting the exam and must be sure to have a high speed internet connection to eliminate the chance of technical problems. Exams are timed and can only be taken once. Once the exam has begun, the allotted time will begin counting down and students will not be able to "pause" or put the exam time on hold, even if they disconnect from the course site or exam. Students should save their answers frequently by clicking on the "Save" or "Save All Responses" button. Students should not click the "Submit Quiz" button until they have completed the exam as it will not be possible to re-enter the exam once the test has been submitted. Students who encounter technical problems as a result of failing to comply with these guidelines will not be given an opportunity to re-take or re-access an exam. Any technical problems should be immediately referred to the help desk.

Make Up Exams

If a student misses a midterm exam, that student will receive a grade of 0 for the exam. Make-up exams will only be granted at the discretion of the instructor. Any request for a make-up exam must be made in writing and include documentation explaining why the absence was legitimate. Such a request must be received within 3 calendar days of the missed exam date, unless the student is physically unable to submit such a request during that time period. Legitimate reasons may include illness severe enough to require professional treatment, death in the immediate family, participation in University activities, and/or legal obligations. Technical problems with accessing the course will not be considered a valid excuse for missing an exam unless it can be shown that the problem is the fault of the D2L platform.

Class Discussion: 100 Points (20% of total course grade)

This is the second graded component of the course and will consist of six discussions. Topics for the discussion will be posted on **starting date of each module at 9 AM**. Each discussion thread will close at **11:30 PM on closing date of each module**. Regardless of the reason, there will be no make-up opportunities for discussion assignments and students will not receive any credit for posts made after the deadline.

The instructor will create a discussion thread topic for each discussion to which students are expected to compile responses.

Students will be graded upon two criteria. First, students are expected to submit an original response to the topic posted, answering all parts of the topic (one original response requiring 200-300 words in length). Second, students are expected to respond to the posts of other students (at least two peer responses requiring at least 100 words each in length). Students should engage in conversation with their peer students in a thoughtful discussion about the topic as well as their individual responses to the topic. These posts should not be made all on the same day during the final hours of the discussion time line.

Students will receive a grade on each discussion assignment (Students who do not participate will receive a 0). Grades will be based both upon the quality of the content of a student's posts, as well as the student's engagement with other students by responding to posts. Posts that do not fully answer the questions or do not respond posted will not receive full credit. Students who wait until the end of the time frame may receive a grade penalty. **Discussion posts cannot be made up.**

o Post your discussion answers to respond to the discussion questions
   [Possible points (12 points x 6 Modules) = 72 points]
o Respond to classmates' postings
   [Possible points ((2.5 points x 2 responses) x 6 Modules) = 30 points]

Possible assigned points will be divided by the total number of discussion questions. For instance, if there are two discussion questions in the Module, 6 points will be assigned to original discussion for question #1 and remaining 6 points for questions #2. 4 points will be assigned to two responses for question #1 and remaining 4 points to two responses for question #2.

See the Guidelines/Rubric for Discussion Answer and Guidelines/Rubric for Responding Peer's Posting for the evaluation criteria (Will be placed in Doc Sharing under Course Document).

All content submitted for Discussion Assignments must be a student's original submission. Any material taken from another source, including the textbook, should include a proper citation. Material which is copied or pasted from any source will be considered plagiarism as discussed above in the Course Policies and Procedures section.

Class Activities: 150 points (30% of total course grade)
You will have an opportunity to do a variety of class activities which will include the best practices in data analysis. Assignments will consist of problem sets, short reports on research design, and data analysis working with data sets in SPSS. More specific information will be provided later.

o Complete class activity [Possible points (25 points x 6 Modules) = 150 points]

Research Design: 120 points (20% of total course grade)
One of the major assignments that students will complete during the course of the semester is producing a research design. Any scientific research project should begin with an overall plan. What are the questions to be investigated? How can these questions best be answered? What evidence should be gathered? Where and when? What sorts of findings would support the hypotheses? What would require rejection of the hypotheses? These essential questions should be fully answered in your research design. I will discuss more details about the research design as the semester progresses.

Instructions with details on research design and presentation will be provided later.

o Write a research design [Possible points (75 points x 1 design) = 75 points]

Summary of Assignments and Grading

Assignments	How Many	Point Value	Total Possible	Percent of Total
Exam	2	75	150 points	30%
Discussion	6	17	100 points	20%
Class Activity	6	25	150 points	30%
Research Design	1	75	75 points	15%
Presentation	1	25	25 points	5%
Total			500 points	100%

The final grade will be determined on the following basis:

Grading Scale

Points	Grade	Standard
450-500	A	Superior
400-449	B	Above Average
350-399	C	Average Performance
300-349	D	Below Average
259 and Below	F	Unsatisfactory

Late Work

No late work accepted and work cannot be made up. Technical difficulties of the student's equipment or internet provider are not excused. When such difficulties occur, students are expected to locate an alternative source for submitting assignments, e.g., neighbor, workplace, public library, etc. Technical difficulties caused by the University or D2L can be excused provided the student obtains documentation from technical support. Students should always have a back-up in mind for unexpected glitches in technology.

However, if you cannot submit your work on time due to the pandemic, contact the instructor as soon as you can. The acceptance of late work is at the discretion of the instructor and a student must include verifiable justification.

TECHNOLOGY REQUIREMENTS

LMS
All course sections offered by Texas A&M University-Commerce have a corresponding course shell in the myLeo Online Learning Management System (LMS). Below are technical requirements

LMS Requirements:
https://community.brightspace.com/s/article/Brightspace-Platform-Requirements

LMS Browser Support:
https://documentation.brightspace.com/EN/brightspace/requirements/all/browser_support.htm

YouSeeU Virtual Classroom Requirements:
https://support.youseeu.com/hc/en-us/articles/115007031107-Basic-System-Requirements

ACCESS AND NAVIGATION

You will need your campus-wide ID (CWID) and password to log into the course. If you do not know your CWID or have forgotten your password, contact the Center for IT Excellence (CITE) at 903.468.6000 or helpdesk@tamuc.edu.

Note: Personal computer and internet connection problems do not excuse the requirement to complete all course work in a timely and satisfactory manner. Each student needs to have a backup method to deal with these inevitable problems. These methods might include the availability of a backup PC at home or work, the temporary use of a computer at a friend's home, the local library, office service companies, Starbucks, a TAMUC campus open computer lab, etc.

COMMUNICATION AND SUPPORT

Student Support
If you have any questions or are having difficulties with the course material, please contact your Instructor.

Technical Support
If you are having technical difficulty with any part of Brightspace, please contact Brightspace Technical Support at 1-877-325-7778. Other support options can be found here:
https://community.brightspace.com/support/s/contactsupport

System Maintenance
Please note that on the 4th Sunday of each month there will be System Maintenance which means the system will not be available 12 pm-6 am CST.

It is very important to go to this online course 4-5 times each week to:

1. Read new announcements
2. Check your university email
3. Review activities and assignments
4. Check the schedule of activities and assignments
5. Communicate as needed with your instructor and class members.

Submitting Assignments
You are responsible for attaching the correct assignment to the correct submission folder. When you submit your assignment, you should always click on the submitted file(s) to make sure the assignment is there. You can tell if it is attached by clicking on the submitted file(s) and actually open and view the document. Submitting an incorrect document, a blank document, or no document is counted as failure to complete the assignment on time.

Each assignment or work should be done in MS-Word, including your name in the content. Also make your computer file name, when adding your file(s) in the submission folder, using your last name and a specific assignment (i.e., Choi Activity1.docx).

Announcements
Announcements are posted often in the course. When you go to the course, you should first read any announcements that have been posted since you were last in the class.

Email Correspondence
Email from me is sent to your University email account. It is important to go to MyLeo mail regularly to check for messages.

If you need to contact me, email is the best way to reach me. Please send your message with your first and last name so I know who you are. Unless otherwise announced, I will do my best to respond within 48 hours except weekends.

Access to SPSS
You will learn how to use SPSS (statistical software package) to conduct empirical research in social science using the tools covered in class. Some homework assignments require access to SPSS. Students can access SPSS through the computer lab or computers in the university library. You can also purchase IBM® SPSS® Student GradPack.

COURSE AND UNIVERSITY PROCEDURES/POLICIES

Code of Student Conduct: All students enrolled at the university shall follow the tenets of common decency and acceptable behavior conducive to a positive learning environment. *Faculty have the authority to request students who exhibit inappropriate behavior to leave the class and may refer serious offenses to the University Police Department and/or the Dean of Students for disciplinary action.* Failure to comply with the Code of Student Conduct and commonsensical directions listed above may result in a verbal request to cease inappropriate behavior, your immediate removal from the class, being immediately dropped from the class, and/or a review by an appropriate university disciplinary agency. For more information on this subject, please see the Student Guidebook.

Student Conduct
All students enrolled at the University shall follow the tenets of common decency and acceptable behavior conducive to a positive learning environment. The Code of Student Conduct is described in detail in the Student Guidebook.
http://www.tamuc.edu/Admissions/oneStopShop/undergraduateAdmissions/studentGuidebook.aspx

Students should also consult the Rules of Netiquette for more information regarding how to interact with students in an online forum: https://www.britannica.com/topic/netiquette

TAMUC Attendance
For more information about the attendance policy please visit the Attendance webpage and Procedure 13.99.99.R0.01.
http://www.tamuc.edu/admissions/registrar/generalInformation/attendance.aspx

http://www.tamuc.edu/aboutUs/policiesProceduresStandardsStatements/rulesProcedures/13students/academic/13.99.99.R0.01.pdf

Academic Integrity

Students at Texas A&M University-Commerce are expected to maintain high standards of integrity and honesty in all of their scholastic work. For more details and the definition of academic dishonesty see the following procedures:

Undergraduate Academic Dishonesty 13.99.99.R0.03

http://www.tamuc.edu/aboutUs/policiesProceduresStandardsStatements/rulesProcedures/13students/undergraduates/13.99.99.R0.03UndergraduateAcademicDishonesty.pdf

Graduate Student Academic Dishonesty 13.99.99.R0.10

http://www.tamuc.edu/aboutUs/policiesProceduresStandardsStatements/rulesProcedures/13students/graduate/13.99.99.R0.10GraduateStudentAcademicDishonesty.pdf

ADA Statement

Students with Disabilities

The Americans with Disabilities Act (ADA) is a federal anti-discrimination statute that provides comprehensive civil rights protection for persons with disabilities. Among other things, this legislation requires that all students with disabilities be guaranteed a learning environment that provides for reasonable accommodation of their disabilities. If you have a disability requiring an accommodation, please contact:

Office of Student Disability Resources and Services
Texas A&M University-Commerce
Gee Library- Room 162
Phone (903) 886-5150 or (903) 886-5835
Fax (903) 468-8148
Email: studentdisabilityservices@tamuc.edu
Website: Office of Student Disability Resources and Services
http://www.tamuc.edu/campusLife/campusServices/studentDisabilityResourcesAndServices/

Nondiscrimination Notice

Texas A&M University-Commerce will comply in the classroom, and in online courses, with all federal and state laws prohibiting discrimination and related retaliation on the basis of race, color, religion, sex, national origin, disability, age, genetic information or veteran status. Further, an environment free from discrimination on the basis of sexual orientation, gender identity, or gender expression will be maintained.

Campus Concealed Carry Statement

Texas Senate Bill - 11 (Government Code 411.2031, et al.) authorizes the carrying of a concealed handgun in Texas A&M University-Commerce buildings only by persons who have been issued and are in possession of a Texas License to Carry a Handgun. Qualified law enforcement officers or those who are otherwise authorized to carry a concealed handgun in the State of Texas are also permitted to do so. Pursuant to Penal Code (PC) 46.035 and A&M-Commerce Rule 34.06.02.R1, license holders may not carry a concealed handgun in restricted locations.

For a list of locations, please refer to the Carrying Concealed Handguns On Campus document and/or consult your event organizer.

Web url:
http://www.tamuc.edu/aboutUs/policiesProceduresStandardsStatements/rulesProcedures/34SafetyOfEmployeesAndStudents/34.06.02.R1.pdf

Pursuant to PC 46.035, the open carrying of handguns is prohibited on all A&M-Commerce campuses. Report violations to the University Police Department at 903-886-5868 or 9-1-1.

University's Pandemic Response

"A&M-Commerce requires the use of face-coverings in all instructional and research classrooms/laboratories. Exceptions may be made by faculty where warranted. Faculty have management over their classrooms. Students not using face-coverings can be required to leave class. Repetitive refusal to comply can be reported to the Office of Students' Rights and Responsibilities as a violation of the student Code of Conduct."

"Students should not attend class when ill or after exposure to anyone with a communicable illness. Communicate such instances directly with your instructor. Faculty will work to support the student getting access to missed content or completing missed assignments."

COURSE SCHEDULE

Module 1 (August 24 – September 1)
Course Introduction

Class Activity #1

Module 2 (September 2 – 15)
Nature of Social Science Analysis
Readings: Chs. 1, 2

Class Activity #2
Discussion #1

Module 3 (September 16 – 29)
Research Process
Readings: Chs. 3, 4, 5

Class Activity #3
Discussion #2

Module 4 (September 30 – October 13)
Building Theories and Framing Hypotheses / Research Design
Statistical Inference and Hypothesis Testing
Readings: Chs. 6, 7, 8, 9

Exam #1
Class Activity #4
Discussion #3

Module 5 (October 14 – 27)
Topics: Topics: Quantitative Research
Readings: Chs. 10, 11, 12, 13

Exam #2
Class Activity #5
Discussion #4

Module 6 (October 28 – November 10)
Topics: Regression
Readings: Ch. 14

Class Activity #6
Discussion #5

Module 7 (November 11 – 24)

Topics: Applications of Multiple Regression
Readings: Ch. 14

Exam #2
Discussion #6
Research Design

Module 8 (November 25 – December 8)

Research Presentation

√ Many class activities, discussions, exams, and reflection papers are due at **11:30 PM on Tuesday**.

√ Please note that the instructor reserves the right to change any part of this syllabus as needed over the course of the semester. Any and all changes will be announced.