PSCI 3301/SOCI 3305: Research Methods in the Social Sciences, Fall 2009

Section 101: MW 4:30-5:45 p.m., 117 Cowart Hall (BCH)

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Hours: MW 10:30-11:00 a.m.; MW 3:00-4:30 p.m.; or by appointment.

The purpose of this course is to train students in how to analyze political and social phenomena in a rigorous and scientific manner. This knowledge requires an understanding of two different components: research design and statistics.

In the first component, students will learn how to discriminate between theories, pose proper research questions, construct a relevant hypothesis, make valid causal inferences, operationalize concepts, and test their hypotheses. The latter component offers the student a "statistical toolbox" to use as he or she pursues the scientific study of the social sciences. This component covers quantitative topics such as central tendency and dispersion, measures of association, and regression analysis, using both manual computation and computer software.

Above all else, it is my hope that this course will whet your appetite for the study of politics and sociology as a *science*, and thus prepare you to better understand the content of future classes in the social sciences and perform your own inquiries into political and social phenomena.

To succeed in this class, you should have already completed the college's requirement of six hours in college-level mathematics, including at least one course in college algebra.

Student Learning Objectives: Ideally, at the conclusion of this course, you will have a greater understanding of

- ▶ the scientific foundations of social inquiry.
- ▶ the problems associated with measuring social phenomena.
- ▶ how to translate abstract concepts into measurable variables.
- ▶ how to test hypotheses about the relationships between variables.
- ▶ the appropriate tests for relationships among variables.
- ▶ how to consume and produce social scientific research.
- ▷ how to select appropriate research topics.
- ▶ how to produce a *literature review* of existing research.

Required Materials: There is one book required for this course:

▶ Paul Kellstedt and Guy Whitten. 2009. *The Fundamentals of Political Science Research*. New York: Cambridge University Press. ISBN 978-0-521-69788-0.

This textbook should be available, new and used, at the TAMIU Bookstore in the Student Center; you may also be able to order it on-line at a discount.

Additional readings may be assigned at the discretion of the professor and will be provided for you at the library reserve desk, on the course Angel site, or as handouts in class.

You will also need a scientific, financial, or statistical calculator if you do not already have one—it will need to be capable of calculating square roots, logarithms, and e^x (aka $\exp(x)$).

Assignments and Grading: Your grade in this course will be based on the following elements:

Research Design Paper	20%
Midterm Exam	30%
Final Exam	30%
Homework and Lab Exercises	15%
Attendance and Participation	5%

Your final grade in the course will be assigned based on this scale:

Final Average	≥ 90.0	≥ 80.0	≥ 70.0	≥ 60.0	< 60.0
Grade	A	В	C	D	F
Grade Points	4.0	3.0	2.0	1.0	0.0

Exams: The exams will be open-book, in-class examinations, consisting of short-answer questions and statistical problems. The midterm exam will cover topics covered up to that point in the course; per college policy, the final exam is *comprehensive*.

On the quantitative portions of both exams, you will be expected to *show all your work*. If you do not show sufficient work to indicate how you arrived at your answer, you will not receive any credit for that question, even if your answer is mathematically "correct."

Homework and Lab Assignments: The statistical portion of the class will include regularly-scheduled homework assignments, designed to improve your understanding of the material presented in the lecture. The assignments will generally be due at the beginning of the following class period. Any variations in this schedule will be announced when the assignment is given.

Homework assignments, unlike the exams, will primarily be graded on the basis of whether or not a reasonable effort was made to correctly answer the problems (correctness is a secondary consideration). It is in your best interest—both in terms of your grade on the homework, and your performance on the exams—to complete these assignments to the best of your ability.

Research Design Paper: The research design paper will be approximately 10–12 pages in length in which you will propose an empirical, quantitative research project in political science or sociology, broadly defined.

You will turn in the paper topic on the date indicated on the syllabus. After selecting an appropriate topic, in your paper you must:

- 1. explain the relevance of the topic;
- 2. conduct a literature review critiquing *at least ten* items of previous literature on (or directly related to) the topic, the majority of which must have appeared in academic journals or scholarly books; and
- 3. propose a hypothesis (or hypotheses) and explain how this hypothesis (or these hypotheses) will be tested.

Your paper must be an individual effort; you may consult with me, the TAMIU Writing Center, other faculty members, or other students, but the writing and research must be substantially your own work. The paper will be due on the last regular class day of the course.

The body of your paper should be double-spaced and written using a proportional typeface (either 11 point or 12 point), with one-inch margins and including page numbers. You should include a title page with the date, title, and appropriate identifying information.

The paper must consistently utilize the citation style of the American Political Science Association or

¹Proportional typefaces include Times New Roman, Arial, Calibri, Garamond, etc. "Typewriter-style" (constant-width) typefaces such as Courier New are not acceptable.

American Sociological Association, include a full *bibliography* listing the works cited in your paper, and be written in standard English using coherent prose and acceptable grammar. Please refer to *The Style Manual for Political Science* published by the APSA for a complete guide to the proper use of APSA style; similarly, the ASA has published the *ASA Style Guide*.

The paper must be submitted **both** in paper (hard copy) format to the professor and in the appropriate TurnItIn.com "drop box" on the TAMIU Angel E-Learning website. In the event that the timeliness of an assignment is in question, the time submitted to Angel will be used as the definitive record of when the assignment was received, provided the hard copy is substantially identical. The professor will not grade any assignment not received in *both* formats.

Class Policies: I make it a general policy to treat all students as adults. While this affords you, the student, greater freedom than you may have had in high school, it also means that you must take a greater personal responsibility for your performance in the course. I am always happy to meet with students to discuss their concerns about the course, but I will not necessarily assume that you are in difficulty simply because you perform poorly on a homework assignment or disappear from class for a few days.

Please provide a respectful learning environment for your fellow students. Repeated tardiness, cell phone disruptions, reading materials unrelated to the course (such as the student newspaper), abuse of communication technologies (e.g., web browsing/IMing/texting during class), or other disruptive behavior during class will adversely affect your grade. Per university policy, repeated disruptive behavior may result in your involuntary withdrawal from the course.

Please arrive at class *on time* and mute (or switch off) all pagers, cell phones, and alarms during class.

Make-up examinations must be scheduled two weeks in advance in the case of an **unavoidable** planned or reasonably-forseeable absence; otherwise, make-ups will be given only in the case of an illness or emergency that is properly **documented**. Please refer to the student absence policy posted on the TAMIU website for examples of absences that will ordinarily be excused by the professor and specific documentation that is acceptable. Should you have three final exams scheduled for one day, please consult with me to arrange an alternative time to take your final.

Any extra-credit opportunities offered by the professor will be offered to **all** students on an equal basis. Please do not ask the professor for individualized extra credit opportunities.

I do not provide lecture notes for students under any circumstances. You will have to rely on the generosity of a classmate or make use of any materials provided on the textbook website or the textbook's study guide, if applicable.²

This syllabus is subject to revision by the professor.

Grade Appeals: If you wish to dispute a grade on a particular assignment for any reason other than an obvious arithmetic error on my part, you will need to type a one-page explanation of your position and turn it in, along with the original graded assignment, *at least one week after* the assignment is returned to you. I will then consider your appeal and make a determination. Appeals must be submitted in hard copy format; no appeals submitted via email will be considered.

For appeals regarding your final grade in the course, please consult the Student Handbook and Catalog for procedures.

²Students with disabilities who require notes or other learning environment accommodations should consult with the Student Disability Services office for assistance.

University and College Policies: The following policies of the TAMIU College of Arts and Sciences and Texas A&M International University are reproduced here for your information; you may already be familiar with them from other courses, but please review them.

Classroom Behavior The College of Arts and Sciences encourages classroom discussion and academic debate as an essential intellectual activity. It is essential that students learn to express and defend their beliefs, but it is also essential that they learn to listen and respond respectfully to others whose beliefs they may not share. The College will always tolerate diverse, unorthodox, and unpopular points of view, but it will not tolerate condescending or insulting remarks. When students verbally abuse or ridicule and intimidate others whose views they do not agree with, they subvert the free exchange of ideas that should characterize a university classroom. If their actions are deemed by the professor to be disruptive, they will be subject to appropriate disciplinary action, which may include being involuntarily withdrawn from the class.

Plagiarism and Cheating Plagiarism is the presentation of someone else's work as your own. 1) When you borrow someone else's facts, ideas, or opinions and put them entirely in your own words, you must acknowledge that these thoughts are not your own by immediately citing the source in your paper. Failure to do this is plagiarism. 2) When you also borrow someone else's words (short phrases, clauses, or sentences), you must enclose the copied words in quotation marks as well as citing the source. Failure to do this is plagiarism. 3) When you present someone else's paper or exam (stolen, borrowed, or bought) as your own, you have committed a clearly intentional form of intellectual theft and have put your academic future in jeopardy. This is the worst form of plagiarism.

Here is another explanation from the 2010, sixth edition of the Manual of The American Psychological Association (APA):

Plagiarism: Researchers do not claim the words and ideas of another as their own; they give credit where credit is due. Quotations marks should be used to indicate the exact words of another. Each time you paraphrase another author (i.e., summarize a passage or rearrange the order of a sentence and change some of the words), you need to credit the source in the text.

The key element of this principle is that authors do not present the work of another as if it were their own words. This can extend to ideas as well as written words. If authors model a study after one done by someone else, the originating author should be given credit. If the rationale for a study was suggested in the Discussion section of someone else's article, the person should be given credit. Given the free exchange of ideas, which is very important for the health of intellectual discourse, authors may not know where an idea for a study originated. If authors do know, however, they should acknowledge the source; this includes personal communications. (pp. 15-16)

Consult the Writing Center or a recommended guide to documentation and research such as the Manual of the APA or the MLA Handbook for Writers of Research Papers for guidance on proper documentation. If you still have doubts concerning proper documentation, seek advice from your instructor prior to submitting a final draft.

Penalties for Plagiarism: Should a faculty member discover that a student has committed plagiarism, the student will receive a grade of 'F' in that course and the matter will be referred to the Honor Council for possible disciplinary action. The faculty member, however, has the right to give freshmen and sophomore students a "zero" for the assignment and to allow them to revise the assignment up to a grade of "F" (50%) if they believe that the student plagiarized out of ignorance or carelessness and not out of an attempt to deceive in order to earn an unmerited grade. This option is not available to juniors, seniors, or graduate students, who cannot reasonably claim ignorance of documentation rules as an excuse.

Penalties for Cheating: Should a faculty member discover a student cheating on an exam or quiz or other class project, the student will receive a "zero" for the assignment and not be allowed to make the assignment up. The incident must be reported to the chair of the department and to the Honor Council. If the cheating is extensive, however, or if the assignment constitutes a major grade for the course (e.g., a final exam), or if the student has cheated in the past, the student should receive an "F" in the course, and the matter should be referred to the Honor Council. Under no circumstances should a student who deserves an "F" in the course be allowed to withdraw from the course with a "W."

Student Right of Appeal: Faculty will notify students immediately via the student's TAMIU e-mail account that they have submitted plagiarized work. Students have the right to appeal a faculty member's charge of academic dishonesty

by notifying the TAMIU Honor Council of their intent to appeal as long as the notification of appeal comes within 3 business days of the faculty member's e-mail message to the student. The Student Handbook provides details.

UConnect, TAMIU E-Mail, and Dusty Alert Personal Announcements sent to students through TAMIU's UConnect Portal and TAMIU E-mail are the official means of communicating course and university business with students and faculty—not the U.S. Mail and not other e-mail addresses. Students and faculty must check UConnect and their TAMIU e-mail accounts regularly, if not daily. Not having seen an important TAMIU e-mail or UConnect message from a faculty member, chair, or dean is not accepted as an excuse for failure to take important action. Students, faculty, and staff are encouraged to sign-up for Dusty Alert (see www.tamiu.edu). Dusty Alert is an instant cell phone text-messaging system allowing the university to communicate immediately with you if there is an on-campus emergency, something of immediate danger to you, or a campus closing.

Copyright Restrictions The Copyright Act of 1976 grants to copyright owners the exclusive right to reproduce their works and distribute copies of their work. Works that receive copyright protection include published works such as a textbook. Copying a textbook without permission from the owner of the copyright may constitute copyright infringement. Civil and criminal penalties may be assessed for copyright infringement. Civil penalties include damages up to \$100,000; criminal penalties include a fine up to \$250,000 and imprisonment.

Students with Disabilities Texas A&M International University seeks to provide reasonable accommodations for all qualified persons with disabilities. This University will adhere to all applicable federal, state, and local laws, regulations and guidelines with respect to providing reasonable accommodations as required to afford equal education opportunity. It is the student's responsibility to register with the Director of Student Counseling and to contact the faculty member in a timely fashion to arrange for suitable accommodations.

Incompletes The College policy for "Incompletes" discourages them. They are appropriate, however, when the following requirements are met:

- ➤ The student cannot complete the class because of a severe illness to self or immediate family member at the very end of the semester (after the date for withdrawal from class) or because of a traumatic event in the student's life (e.g., death of or serious injury or illness to an immediate family member) at the end of the semester, AND
- ▶ The student is passing the class at the time he or she cannot complete the semester, AND
- ➤ The student has completed either 85–90% of the course requirements or is missing only major assignments due after the final date for withdrawal from class and after the onset of the illness or traumatic event (e.g., assignments such as the final exam for the course or a research paper), AND, finally,
- > The faculty member must have the approval of the department chair before giving an Incomplete.

Student Responsibility for Dropping a Course It is the responsibility of the STUDENT to drop the course before the final date for withdrawal from a course. Faculty members, in fact, may not drop a student from a course.

Independent Study Course Independent Study (IS) courses are offered only under exceptional circumstances. Required courses intended to build academic skills may not be taken as IS (e.g., clinical supervision and internships). No student will take more than one IS course per semester. Moreover, IS courses are limited to seniors and graduate students. Summer IS courses must continue through both summer sessions.

Grade Changes & Appeals Faculty are authorized to change final grades only when they have committed a computational error, and they must receive the approval of their department chairs and the dean to change the grade. As part of that approval, they must attach a detailed explanation of the reason for the mistake. Only in rare cases would another reason be entertained as legitimate for a grade change. A student who is unhappy with his or her grade on an assignment must discuss the situation with the faculty member teaching the course. If students believe that they have been graded unfairly, they have the right to appeal the grade using a grade appeal process in the Student Handbook and the Faculty Handbook.

Final Examination Final Examination must be comprehensive and must contain a written component. The written component should comprise 20% of the final exam grade. Exceptions to this policy must receive the approval of the department chair and the dean at the beginning of the semester.

Withdrawal Deadlines: The last day to drop the course without it appearing on your transcript is Wednesday, September 9. The withdrawal deadline (last day for a "W") is Friday, November 6.

Course Outline: Any changes to this schedule will be announced in class and will be posted to the course calendar and in Angel. We will not necessarily read books in the order they appear on the syllabus; please be sure you read the correct chapters *in advance of* the designated class dates.

While the professor may periodically remind students of upcoming scheduled events, it is **your responsibility** to be familiar with this schedule and any changes to it.

- **Aug 24: Introduction** Introduction to the course; political science and sociology as scientific endeavors.
- **Aug 26: Research in the Social Sciences** What is research?; forms of social scientific research.

Reading: Chapter 1.

Aug 31; Sep 2: Theories and Research Topics What is a theory?; characteristics of "good" theories; what is a good research topic?; library research and literature reviews.

Reading: Chapter 2; handout on literature reviews.

Sep 7: Causality What is a *causal* relationship? Why is causality important?

Reading: Chapter 3.

Sep 9: Research Design Approaches to demonstrating causal relationships; external versus internal validity; ethical issues.

Reading: Chapter 4.

Sep 14, 16: The Problem of Measurement Defining, measuring, and operationalizing concepts; levels of measurement.

Reading: Chapter 5.

Sep 21, 23: Descriptive Statistics and Graphs Describing the distribution of variables and their central tendency.

Reading: Chapter 6.

Sep 28: Introducing SPSS Orientation to basic features of the SPSS statistical software package.

Reading: handout on SPSS.

Sep 30; Oct 5, 7: Statistical Inference Samples and populations; statistics and parameters; sampling frames and sampling techniques; the central limit theorem.

Reading: Chapter 7.

Oct 12 Midterm Exam.

Oct 14, 19: Hypothesis Testing Why test hypotheses? What hypothesis test is right for your problem? The almighty p value.

Reading: Chapter 8, pp. 134–39.

Oct 21: The chi-square test Testing relationships among categorical variables using the χ^2 test of association.

Reading: Chapter 8, pp. 139–45.

Oct 26: The difference of means test Testing the difference between two groups using a *t* test.

Reading: Chapter 8, pp. 145–50.

Oct 28: The correlation coefficient Testing whether two continuous variables are associated with each other using the correlation coefficient r.

Reading: Chapter 8, pp. 150–56.

Nov 2, 4, 9: Bivariate regression Testing whether one variable causes variation in another.

Reading: Chapter 9.

Nov 11, 16, 18: Multiple regression Controlling for rival explanations in regression.

Reading: Chapter 10.

Nov 23, 30: Dummy variables in multiple regression Using categorical variables as explanatory variables in regression.

Reading: Chapter 11, pp. 202–212.

Dec 2: Review for final exam Papers due at the beginning of class.

Monday, December 7, 5:00–8:00 p.m. Final Exam