Course: Add: _ X__ Delete: _ ____ Change: PSCI 5322 Advanced Quantitative Methods (same as SOCI 5322)

(check all that apply) SCH __3__ Description ___x__ Prerequisite _____

If new, provide Course Prefix, Number, Title, SCH Value, Description, prerequisite, lecture/lab (hours if applicable) and student learning outcomes. If in current catalog, provide change and attach page with changes in red and provide a brief justification.

-Course Description- An advanced course in the practical application of quantitative research methods in social scientific research. Topics include data management using computer software; bivariate and multivariate statistics, including chi-square, correlation, ordinary-least-squares regression, and limited dependent variable models (logit/probit), with an emphasis on computer applications; and presentation of results from quantitative research.

-Prerequisite: PSCI 5321/SOCI 5321(*) with a grade of "B" or better.

(*) May substitute former courses PSCI 5301/SOCI 5302.

-Justification: new course due to restructuring of graduate methods requirements in PADM, PSCI, and SOCI; former course was PSCI 5301/SOCI 5302 “Advanced Methods of Social Research”

Learning Outcomes: The student will be able to:
- Translate social scientific theories into hypotheses which can be empirically tested
- Use appropriate statistical techniques to test hypotheses
- Understand and explain important statistical techniques such as ordinary least squares regression and maximum-likelihood estimation
- Use computer software to estimate statistical models commonly used in the social sciences
- Write a complete research paper based on quantitative analysis of primary or secondary data

Program: Add: _X_____ Change: ______ Attach new/changed Program of Study description and 4-year plan. If in current catalog, provide change and attach page with changes in red.

Minor: Add: _____Delete: _____ Change: ______ Attach new/changed minor. If in current catalog, provide change and attach page with changes in red.

Faculty: Add: _____ Delete: _____ Change: _____ Attach new/changed faculty entry.
If in current catalog, provide change and attach page with changes in red.

**College Introductory Pages:**  
Add information: _____  
Change information: _____  
Attach new/changed information. If in current catalog, provide change and attach page with changes in red.

**Other:**  
Add information: _____  
Change information: _____  
Attach new/changed information. If in current catalog, provide change and attach page with changes in red.

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**Approvals:**

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PSCI/SOCI 5322: Applied Quantitative Methods

Section xxx
Dr. Christopher N. Lawrence <christopher.lawrence@tamiu.edu>
(Also to be taught by Dr. Marcus Ynalvez and Dr. Lynne Manganaro)
Office: 313 Lamar Bruni Vergara Science Center (LBVSC)
Hours: TBD
Phone: (956) 326-2467

This course is an advanced course in the practical application of quantitative research methods in social scientific research. Topics include data management using computer software; bivariate and multivariate statistics, including chi-square, correlation, ordinary-least-squares regression, and limited dependent variable models (logit/probit), with an emphasis on computer applications; and presentation of results from quantitative research.

WITHOUT EXCEPTION, you must complete and pass PSCI/SOCI 5321, Social Inquiry, with a grade of “A” or “B” before enrolling in this course. This course builds on the material presented in the Social Inquiry course.

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

▷ how to translate social scientific theories into hypotheses which can be empirically tested.
▷ the appropriate statistical techniques to use when testing hypotheses.
▷ the theoretical basis of important statistical techniques, such as ordinary least squares regression and maximum-likelihood estimation.
▷ how to use computer software to estimate statistical models commonly used in the social sciences.
▷ how to write a complete research paper based on quantitative analysis of primary or secondary data.

Required Materials: There are three books required for this course:


These textbooks should be available, new and used, at the TAMIU Bookstore in the Student Center; you may also be able to order them 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.
**Assignments and Grading:** Your grade in this course will be based on the following elements:

- **Research Proposal:** 5%
- **Research Paper:** 35%
- **Research Presentation:** 5%
- **Final Exam:** 30%
- **Homework and Lab Exercises:** 20%
- **Attendance and Participation:** 5%

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

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**Exam:** The exam will be an open-book, in-class examination, consisting of short-answer questions. Per college policy, the final exam is comprehensive.

**Research Paper:** The research design paper will be approximately 20–25 pages in length in which you will conduct 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.
4. test the hypothesis (or hypotheses) to determine whether or not they are supported by the data.
5. present the results of your data analysis in your paper.
6. arrive at conclusions about the significance of your findings and consider future directions for this line of research.

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 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 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*.

You will also make a brief presentation to your fellow students in which you discuss your key

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[^1]: Proportional typefaces include *Times New Roman*, *Arial*, *Calibri*, *Garamond*, etc. “Typewriter-style” (constant-width) typefaces such as *Courier New* are not acceptable.
findings.

**Homework and Lab Assignments:** 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.

**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), and abuse of communication technologies (e.g., web browsing/IMing/texting during class) during class will adversely affect your participation 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.

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 the materials provided on the textbook website or the textbook’s study guide. Students with disabilities who require notes or other learning environment accommodations should consult with the Student Disability Services office for assistance.

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.
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.

STUDENT EMAIL ADDRESS: All students must obtain a TAMIU email address and have access to the Angel E-Learning system. Students should check their TAMIU email on a regular basis.

STUDENT RESPONSIBILITY FOR DROPPING A COURSE: It is the student’s responsibility to drop the course before the designated drop date. Faculty are not responsible for dropping students who stop attending class.

OFFICE HOURS: Your professor will keep regular office hours, as posted above, and appointments can be made to accommodate students’ schedules. The door will be open for all students on a “first-come, first-served” basis when no appointment has been previously scheduled.

STUDENTS WITH DISABILITIES: Texas A&M International University seeks to promote reasonable accommodations for all qualified persons with disabilities. This University will adhere to all applicable federal, state, and local level 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 Student Disability Services office and to contact the faculty member in a timely fashion to arrange for suitable accommodations.

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.

COPYRIGHT RESTRICTIONS: The Copyright Act of 1976, as amended by the Digital Millennium Copyright Act, 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 a 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.

PLAGIARISM AND CHEATING: Plagiarism is the presentation of someone else’s work as one’s own work. Recently the internet has complicated the issue. Taking from the internet and presenting it as one’s own work is still plagiarism. Copying another student’s paper or a portion of the paper is called “copying.” Neither plagiarism nor copying will be tolerated. Should a faculty member discover that a student committed plagiarism, the student will receive a grade of “F” in that course and the matter will be referred to the Executive Director of Student Life for possible disciplinary action.

INCOMPLETES: Incompletes are discouraged and are assigned only under extenuating circumstances. College policy mandates 70% of course requirements must be met before an “I” can be considered. In fairness to those students who complete the course as scheduled, under no circumstances will an incomplete (“I”) be changed to an “A” unless the student has experienced a death in the immediate family or has a written medical excuse from a physician.