Quantitative Methods in Linguistics
ENG 686 01W 81211
Fall 2024

Instructor: Dr. Salvatore Attardo
Office Location: Talbot Hall (Hall of Languages) 306
Office Hours: M-TH 11:00 am to noon and 3:00 pm to 4:00 pm, by appointment
Schedule through this link only:
https://calendar.app.google/c24f6NeoM9YUWddz8
Office Fax: 903-886-5980
Office Phone (Department):   903-886-5260
University Email Address: salvatore.attardo@tamuc.edu
Zoom Meeting ID: 645 861 9518
The best way to contact me is via email. I answer within 24 hours.

COURSE INFORMATION

Materials : All readings will be provided in the shell**.**

Course Description
This course is designed to help graduate students with some background in linguistics, but no active knowledge of statistical methods, appreciate the basic concepts in descriptive and analytical statistics as relevant for work in the humanities. In the field of applied linguistics, a working knowledge of statistics is crucial to both understanding the professional literature and to conducting experiments, analyzing results, and writing reports that are considered publishable.

Student Learning Outcomes
A student who completes ENG 686 Quantitative Methods in Linguistics will:
1. Demonstrates knowledge of quantitative research in linguistics; in particular they will be able to plan and carry out a quantitative study of linguistic data.
2. Understand and apply basic principles of statistical analysis, as it applies to linguistics;
3. Analyzes and critiques results of linguistic experimentation;
4. Be able to use R and R-Studio to perform statistical analyses;
5. Be able to use R and R-Studio to produce graphs and visualizations of data.

COURSE ASSESSMENT & INSTRUCTION

Quizzes	**12 x 5**	**= 60%**
Q&A	**14 x 1**	**= 14%**
Participation	**15 x 1**	**= 10%**
Final Project	**10 x 1**	**= 15%**
Intro	**1x 1**	**= 1%**
Total:		**= 100%**

Please note, for graduate classes, "A" grades reflect work which is clearly superior and exceeds the minimum criteria on all dimensions. "B" grades mean a good, solid performance which fulfills the basic requirements for a particular assignment. Any work that receives a grade of "C" or lower does not meet the minimum requirements for graduate work.

A = >90%; B = 81-90%; C = 71-80%; D = 61-70%; F = < 60%

COURSE REQUIREMENTS

❖ Students will be responsible for familiarizing themselves thoroughly with the syllabus and all course instructions found in the online course platform
❖ Each week there will be a Question and Answer session and Comprehension Review (quiz) online. The Q&A ends on Thursdays, at 11:30 pm CST. The CR can be taken on Friday at Saturday until 11:30 pm CST.
❖ Students must **log in to the LMS *several times a week*, at an absolute minimum**. If you have to miss a Q&A or CR, please contact the instructor immediately.
❖ **Student must attend the live session or watch the video of the session, which is usually posted on the same day of the live session, before the CR is due. Live sessions will be held on Mondays at 5:00 pm CST.**

❖ Students will be responsible for reading all online materials
❖ Students will be responsible for completing and submitting all assignments online
❖ Students will be responsible for contacting the professor via the Virtual office or email regarding questions on assignments PRIOR to the due date.
❖ Students unable to meet a deadline should contact the instructor ***AHEAD*** of the deadline.
❖ Information on the final research project is found in the shell. The research project must be in pdf format.

Minimal Technical Skills Needed

Using the learning management system, using a text editor (e.g. Google Docs, MSWord, Pages, etc.), a Web Browser, a spreadsheet (e.g., Google Sheets, MSExcel, Numbers, etc.), using the library web site.

Instructional Methods

This is a dual modality course. It you are registered in the online version (01W) the course is delivered entirely online. If you are registered in the face to face section (01E) you must attend the live sessions in person on campus. You must also complete the weekly online discussions and comprehension reviews, and other assignments.

Class participation (primarily in the form of class discussions, completion of the content, conferences with the instructor) is also part of the assessment. Please note that participation in and reading other students' responses in the online discussions is also part of class participation.

- *Students should always keep a backup of all materials submitted online.*

TECHNOLOGY REQUIREMENTS

For this class you will need to use R and R Studio. Instructions on how to download and install the software will be provided in class. It is also possible to use an online copy of the software. You will also need a spreadsheet (any spreadsheet is acceptable, provided it generates .csv files) and a text editor (any text editor is acceptable, provided it can export to pdf). I strongly suggest you familiarize yourself with the spreadsheet and text editor of your choice in the early weeks of the class. Step by step instruction in R will be provided in the lectures.

Browser support

D2L is committed to performing key application testing when new browser versions are released. New and updated functionality is also tested against the latest version of supported browsers. However, due to the frequency of some browser releases, D2L cannot guarantee that each browser version will perform as expected. If you encounter any issues with any of the browser versions listed in the tables below, contact D2L Support, who will determine the best course of action for resolution. Reported issues are prioritized by supported browsers and then maintenance browsers.

Supported browsers are the latest or most recent browser versions that are tested against new versions of D2L products. Customers can report problems and receive support for issues. For an optimal experience, D2L recommends using supported browsers with D2L products.

Maintenance browsers are older browser versions that are not tested extensively against new versions of D2L products. Customers can still report problems and receive support for critical issues; however, D2L does not guarantee all issues will be addressed. A maintenance browser becomes officially unsupported after one year.

Note the following:

- Ensure that your browser has JavaScript and Cookies enabled.
- For desktop systems, you must have Adobe Flash Player 10.1 or greater.
- The Brightspace Support features are now optimized for production environments when using the Google Chrome browser, Apple Safari browser, Microsoft Edge browser, Microsoft Internet Explorer browser, and Mozilla Firefox browsers.

Desktop Support

Browser	Supported Browser Version(s)	Maintenance Browser Version(s)
Microsoft® Edge	Latest	N/A

Microsoft® Internet Explorer®	N/A	11
Mozilla® Firefox®	Latest, ESR	N/A
Google® Chrome™	Latest	N/A
Apple® Safari®	Latest	N/A

Tablet and Mobile Support

Device	Operating System	Browser	Supported Browser Version(s)
Android™	Android 4.4+	Chrome	Latest
Apple	iOS®	Safari, Chrome	The current major version of iOS (the latest minor or **point** release of that major version) and the previous major version of iOS (the latest minor or **point** release of that major version). For example, as of June 7, 2017, D2Lsupports iOS 10.3.2 and iOS 9.3.5, but not iOS 10.2.1, 9.0.2, or any other version. Chrome: Latest version for the iOS browser.
Windows	Windows 10	Edge, Chrome, Firefox	Latest of all browsers, and Firefox ESR.

- • You will need regular access to a computer with a broadband Internet connection. The minimum computer requirements are:
    - 512 MB of RAM, 1 GB or more preferred
    - Broadband connection required courses are heavily video intensive
    - Video display capable of high-color 16-bit display 1024 x 768 or higher resolution

- • You must have a:
    - Sound card, which is usually integrated into your desktop or laptop computer
    - Speakers or headphones.
    - *For courses utilizing video-conferencing tools and/or an online proctoring solution, a webcam and microphone are required.

- • Both versions of Java (32 bit and 64 bit) must be installed and up to date on your machine. At a minimum Java 7, update 51, is required to support the learning management system. The most current version of Java can be downloaded at: JAVA web site http://www.java.com/en/download/manual.jsp

- • Current anti-virus software must be installed and kept up to date.

Running the browser check will ensure your internet browser is supported.
> Pop-ups are allowed.
> JavaScript is enabled.
> Cookies are enabled.

- • You will need some additional free software (plug-ins) for enhanced web browsing. Ensure that you download the free versions of the following software:
  - o Adobe Reader https://get.adobe.com/reader/
  - o Adobe Flash Player *(version 17 or later)* https://get.adobe.com/flashplayer/
  - o Adobe Shockwave Player https://get.adobe.com/shockwave/
  - o Apple Quick Time http://www.apple.com/quicktime/download/

- • At a minimum, you must have Microsoft Office 2013, 2010, 2007 or Open Office. Microsoft Office is the standard office productivity software utilized by faculty, students, and staff. Microsoft Word is the standard word processing software, Microsoft Excel is the standard spreadsheet software, and Microsoft PowerPoint is the standard presentation software. Copying and pasting, along with attaching/uploading documents for assignment submission, will also be required. If you do not have Microsoft Office, you can check with the bookstore to see if they have any student copies.

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
Brightspace Support
Need Help?

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 or click on the **Live Chat** or click on the words "click here**"** to submit an issue via email.

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.

Interaction with Instructor Statement

I will respond to emails within one working day (24 hours) of receipt.

COURSE AND UNIVERSITY PROCEDURES/POLICIES

Course Specific Procedures/Policies

Late work will be penalized or will earn zero points, at the instructor's discretion. Missed exams, quizzes, assignments, etc. will earn zero points, unless PRIOR arrangements had been made with the instructor. In the case of extenuating circumstances beyond the students' reasonable control, the instructor will make a decision on a case-by-cases basis. Failure to back up your work, system failures within the last 30 minutes of a submission window, or student error do not fall under extenuating circumstances. **It is the students' responsibility to make sure that the assignments are properly submitted, on time, and backed up in multiple locations.**

Syllabus Change Policy

The syllabus is a guide. Circumstances and events, such as student progress, may make it necessary for the instructor to modify the syllabus during the semester. Any changes made to the syllabus will be announced in advance.

University Specific Procedures

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: Netiquette http://www.albion.com/netiquette/corerules.html

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.

Counseling Center

The Counseling Center at A&M-Commerce, located in the Halladay Building, Room 203, offers counseling services, educational programming, and connection to community resources for students. Students have 24/7 access to the Counseling Center's crisis assessment services by calling 903-886-5145. For more information regarding Counseling Center events and confidential services, please visit www.tamuc.edu/counsel

University AI use in course policy

Texas A&M University-Commerce acknowledges that there are legitimate uses of Artificial Intelligence, ChatBots, or other software that has the capacity to generate text, or suggest replacements for text beyond individual words, as determined by the instructor of the course. Any use of such software must be documented. Any undocumented use of such software constitutes an instance of academic dishonesty (plagiarism).

Individual instructors may disallow entirely the use of such software for individual assignments or for the entire course. Students should be aware of such requirements and follow their instructors' guidelines. If no instructions are provided the student should assume that the use of such software is disallowed.

In any case, students are fully responsible for the content of any assignment they submit, regardless of whether they used an AI, in any way. This specifically includes cases in which the AI plagiarized another text or misrepresented sources.

13.99.99.R0.03 Undergraduate Academic Dishonesty
13.99.99.R0.10 Graduate Student Academic Dishonesty

In light of the above procedure, **any use of AI software in this class is disallowed.**

Quantitative Methods Course Schedule Fall 2024

Week/Unit			Contents	CR	Q&A
1	Aug 26 — Aug 30		The research process	1	1
2	Sept 3-6	Sept 2 Labor day	Introduction to R	2	2
3	Sept 9 — 13		Kinds of data and variables	3	3
4	Sept 16 — 20		Descriptive statistics	4	4
5	Sept 23 — 27	Ampra conference Sept 26-28	Descriptive statistics and visualization	5	5
6	Sept 30 — Oct 4		Normal distribution and testing for normality; parametric and non parametric tests; Chi-squared test	6	6
7	Oct 7 — 11		Inter-rater reliability (Cohen Kappa, Fleiss' Kappa); measures of internal consistency (Cronbach alpha)	7	7
8	Oct 14 — 18		Inferential statistics: basics (significance, effect size)	8	8
9	Oct 21 — 25		Inferential statistics: basics (power)	9	9
10	Oct 28 — Nov 1	Metroplex conf. Nov 1	Parametric tests for difference in means (t-test, z-test); Parametric test for more than one variable (ANOVA)	10	10
11	Nov 4 — Nov 8		Non-parametric test of means (Wilcoxon); Non-parametric test of means for more than one variable (Kruskal-Wallis test, Friedman test))	11	11
12	Nov 11 — Nov 15		Correlation (linear correlation, Pearson, Spearman; Biserial); correlograms	12	12
13	Nov 18 - Nov 22	ArkTESOL Nov 18	Mixed linear models	no cr	13
14	Nov 25 — Nov 29	Thanksgiving Break Nov 28—29	No class		
15	Dec 2 — Dec 6		Catch up, possible external lecture	no cr	14
Finals week	Dec 9 — 13	Dec 13 Graduation	Final project due Dec 11 at 11:30 pm CST	Due on the Saturday of each week	Due on the Thursday of each week