

Quantitative Methods in Linguistics
ENG 686 01W 202680
Fall 2026

Instructor: Dr. Christian F. Hempelmann
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Course Information

Materials

All readings will be provided in the course 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 publishable.

Student Learning Outcomes

A student who completes ENG 686 Quantitative Methods in Linguistics will:

1. Demonstrate 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. Analyze and critique 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

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 requirements on all criteria. “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.

The syllabus and schedule are subject to change.

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 11:30pm CST. The CR can be taken on Friday and Saturday until 11:30pm CST.
- Students must log in to the LMS once per day. If you have to miss a Q&A or CR, please contact the instructor before the deadline and immediately.
- Students 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 are responsible for reading all online materials.
- Students will be responsible for completing and submitting all assignments online.
- Students are responsible for contacting the professor by email regarding questions on assignments or when they can't meet the deadline before to the deadline.
- Information on the final research project is found in the shell. The research project must be in pdf format.
- So-called "AI" may not be used for any assignments in this class

Calendar

unit	start date	note	topic	CR	Q&A
0	8/20		course intro		
1	8/24		the research process	1	1
2	8/31		intro to R	2	2
3	9/7	Labor Day	kinds of data and variables	3	3
4	9/14		descriptive statistics	4	4
5	9/21		descriptive statistics and visualization	5	5
6	9/28		normal distribution & normality; parametric & non-parametric tests; Chi-squared test	6	6
7	10/5	AMPRA	inter-rater reliability (Cohen Kappa, Fleiss' Kappa); measures of internal consistency (Cronbach alpha)	7	7
8	10/12		inferential statistics: basics (significance, effect size)	8	8
9	10/19		inferential statistics: basics (power)	9	9
10	10/26		parametric tests for difference in means (t-test, z-test); parametric test for more than one variable (ANOVA)	10	10
11	11/2		non-parametric test of means (Wilcoxon, Kruskal-Wallis, Friedman tests)	11	11
12	11/9		correlation (linear correlation, Pearson, Spearman; biserial); correlograms	12	12
13	11/16		mixed linear models		13
14	11/23	Thanksgiving	no class		
15	11/30	12/4 last day	catch up		14
	12/7	Finals Week	final project due Dec 9 at 11:30 pm CST		

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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.

LMS

All course sections offered by East Texas A&M University 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

Zoom Video Conferencing Tool

https://inside.tamuc.edu/campuslife/CampusServices/CITESupportCenter/Zoom_Account.aspx?source=universalmenu

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@etamu.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 ETAMU campus open computer lab, etc.

COMMUNICATION AND SUPPORT

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

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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>

COURSE AND UNIVERSITY PROCEDURES/POLICIES

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.etamu.edu/Admissions/oneStopShop/undergraduateAdmissions/studentGuidebook.aspx).

<http://www.etamu.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>

ETAMU Attendance

For more information about the attendance policy please visit the [Attendance](http://www.etamu.edu/admissions/registrar/generalInformation/attendance.aspx) webpage and [Procedure 13.99.99.R0.01](http://www.etamu.edu/admissions/registrar/generalInformation/attendance.aspx).

<http://www.etamu.edu/admissions/registrar/generalInformation/attendance.aspx>

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

Academic Integrity

Students at East Texas A&M University 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.etamu.edu/aboutUs/policiesProceduresStandardsStatements/rulesProcedures/documents/13.99.99.R0.03UndergraduateStudentAcademicDishonestyForm.pdf)
[Undergraduate Student Academic Dishonesty Form](http://www.etamu.edu/aboutUs/policiesProceduresStandardsStatements/rulesProcedures/documents/13.99.99.R0.03UndergraduateStudentAcademicDishonestyForm.pdf)

<http://www.etamu.edu/aboutUs/policiesProceduresStandardsStatements/rulesProcedures/documents/13.99.99.R0.03UndergraduateStudentAcademicDishonestyForm.pdf>

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

AI Use Policy

East Texas A&M University acknowledges that there may be 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 instructor’s 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.

The use of “AI” tools is not permitted in this class, unless explicitly agreed and announced by the instructor for specific assignments.

Students with Disabilities–ADA Statement

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

Velma K. Waters Library Rm 162

Phone (903) 886-5150 or (903) 886-5835

Email: studentdisabilityservices@etamu.edu

Website: [Office of Student Disability Resources and Services](http://www.etamu.edu/campusLife/campusServices/studentDisabilityResourcesAndServices/)

<http://www.etamu.edu/campusLife/campusServices/studentDisabilityResourcesAndServices/>

Nondiscrimination Notice

East Texas A&M University 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 East Texas A&M University buildings only by persons who have

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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 East Texas A&M 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.etamu.edu/aboutUs/policiesProceduresStandardsStatements/rulesProcedures/34SafetyOfEmployeesAndStudents/34.06.02.R1.pdf>

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

East Texas A&M Supports Students' Mental Health

The Counseling Center at East Texas A&M, 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.etamu.edu/counsel



<http://telusproduction.com/app/5108.html>