STATISTICS FOR LINGUISTS
LIN 4005- 28869; LIN 6007- 28871
SYLLABUS - FALL Semester 2023
W 8-10 (3:00-6:00pm)
TUR 2306

Instructor:
Edith Kaan
Kaan@ufl.edu; 352 294 7453 (leave a message)

Office Hours:
Tuesday 3:00-3:50pm; Wednesday 1:55-2:45 pm, and by appointment. In TUR 4127 or over zoom. Contact the instructor for zoom link.

Prerequisites: *Undergraduates:* LIN3010; *Graduate students:* None

Course website: on Canvas: http://elearning.ufl.edu

Course description:
This course gives an overview of commonly used statistical methods in linguistics. Topics include descriptive statistics, T-tests, regression, linear mixed-effects models, and experimental design. Examples are drawn from sociolinguistics, psycholinguistics, corpus linguistics, experimental syntax and second language acquisition.

Objectives:
● To learn how to interpret, evaluate, and write statistical results sections in linguistic research papers.
● To learn how to do conduct data wrangling and statistical tests commonly used in Linguistics using R

Text book:
● (strongly recommended) Urdan, Timothy C. (2010). *Statistics in Plain English.* 3rd or 4th edition. Routlege. ISBN 978-0-415-87291-1 or ISBN 978-1-138-838345
● Other readings (journal articles, manuals) may be assigned over the course of the semester; these readings will be available through uflib.ufl.edu, e-reserves or the course website.

Software:
Excel (Microsoft office); R (www.r-project.org); R-studio (www.rstudio.com).

Laptop:
You are required to **bring your laptop to class** in order to do in-class assignment and group activities. Please have R and R studio installed by the first session.

Course website:
Course materials (reading, lecture notes, syllabus, etc.) will be made available on the Canvas website on E-learning (elearning.ufl.edu/). **Deadlines and grades** will also be posted on the website. You are responsible for checking the site regularly and for letting the instructor know *promptly* if anything is unclear, or if your grade has been entered incorrectly.

Overall grade. The weighting of the various requirements in the final grade is

	Graduates	Undergraduates
Homework and in-class assignments	20%	38%
Tests (3)	60%	60%
Critique paper + data set analysis	18%	N/A
Active participation	2%	2%
Optional: Participation in LIN/SLHS experiments (or alternative assignment)	2% extra credit	2% extra credit

The course grading scale is:
A = 90-100   B = 80-83.9   C = 70-73.9   D = 60-63.9
A- = 87-89.9   B- = 77-79.9   C- = 67-69.9   D- = 57-59.9
B+ = 84-86.9   C+ = 74-76.9   D+ = 64-66.9   E = < 57

For UF grading policies for assigning grade points, see:
https://catalog.ufl.edu/ugrad/current/regulations/info/grades.aspx

Requirements and assignments:

GRADUATE STUDENTS ONLY
Paper critique
- Summary of a published paper on linguistic research using statistical tests
- The summary should include a detailed discussion of the statistical tests used, their appropriateness, the appropriateness of reporting, and an evaluation of how the authors interpret the results from the test. Detailed instructions will be provided in class.
- Due: see schedule

ALL STUDENTS
Homework exercises
- Homework assignments are due about every week (about 10 in total), except in weeks when a test is due. Students have one week to make the homework, see schedule.
- Homeworks are made available on and should be submitted through the course website
- Typical homework assignments include: reading a data set into R and conducting analyses or visualizing the data, applying learned concepts to particular research scenarios, interpreting tables and graphs, interpreting results sections of published reports, making exercises for peers in which new terminology, concepts or techniques are illustrated and practiced.
- Note: in some weeks graduate students may get more or other homework exercises than undergraduate students.

Tests
- There will be three open book tests over the course of the semester, see the schedule on the last page for approximate dates. The format of the test (take-home, or in-class) will be decided closer to the dates.
- Test questions and problems are comparable to those practiced in class and in the homework assignments
- Tests will be made available through the course website
- These tests are non-cumulative, although basic knowledge is assumed of what has been dealt with earlier in the semester (especially concerning R)

Active participation
- Doing the in-class exercises. These are practice exercises illustrating new concepts and techniques. Answers will be provided in class. Doing these exercises is critical, since this allows you to monitor your own understanding and receive immediate feedback.
- Contributing to discussion in class
- Coming to class prepared
- Helping others understand the concepts and problems in class

Participation in LIN/SLHS experiments (optional, extra credit).
To encourage awareness of different aspects of experimental research in language-related fields, you can elect to participate in 2 hours of language or communication research during the semester. Further instructions will follow. You need to have participated in 2 hours of experiments before the last session of this course for you to receive credit. This assignment will be worth a maximum of 2% of your course grade. If you choose not to participate or do not qualify for any of the studies, you can receive the same amount of course credit for reading a short research article (provided by the instructor) and writing a 2 page synopsis. This paper must be turned in no later than the last session of this course.

Attendance Policy, Class Expectations, use of AI, Make-Up Policy, Cell-phone use
- Students are required to submit all assignments and tests before the class period they are due. Please contact the instructor in advance if you need to skip a class, or cannot make a deadline.
- Attendance is mandatory. If you are absent for more than three classes, you will get a warning. If absences persist the instructor can prohibit further attendance and assign a failing grade for excessive absences.
- Requirements for class attendance and make-up exams, assignments, and other work in this course are consistent with university policies that can be found at: catalog.ufl.edu/UGRD/academic-regulations/attendance-policies/
- Students need to disclose any use of AI in their assignments, and need to indicate their prompts and their critical (content) edits of the AI output. AI output without prompts or critical edits will not be accepted. AI needs to be properly cited (https://apastyle.apa.org/blog/how-to-cite-chatgpt).
- Cell-phone use is not allowed during class unless this is part of the course assignments. Laptops and tablets can only be used to take notes and for in-class assignments.

Students Requiring Accommodations
Students with disabilities who experience learning barriers and would like to request academic accommodations should connect with the disability Resource Center by visiting https://disability.ufl.edu/students/get-started/. It is important for students to share their accommodation letter with their instructor and discuss their access needs, as early as possible in the semester.

Course Evaluation
Students are expected to provide professional and respectful feedback on the quality of instruction in this course by completing course evaluations online via GatorEvals. Guidance on how to give feedback in a professional and respectful manner is available at https://gatorevals.aa.ufl.edu/students/. Students will be notified when the evaluation period opens, and can complete evaluations through the email they receive from GatorEvals, in their Canvas course menu under GatorEvals, or via https://ufl.bluera.com/ufl/. Summaries of course evaluation results are available to students at https://gatorevals.aa.ufl.edu/public-results/.

University Honesty Policy
UF students are bound by The Honor Pledge which states, "We, the members of the University of Florida community, pledge to hold ourselves and our peers to the highest standards of honor and integrity by abiding by the Honor Code. On all work submitted for credit by students at the University of Florida, the following pledge is either required or implied: "On my honor, I have neither given nor received unauthorized aid in doing this assignment." The Honor Code (https://www.dso.ufl.edu/sccr/process/student-conduct-honor-code/) specifies a number of behaviors that are in violation of this code and the possible sanctions. Furthermore, you are obligated to report any condition that facilitates academic misconduct to appropriate personnel. If you have any questions or concerns, please consult with the instructor in this class.

Software Use
All faculty, staff, and students of the University are required and expected to obey the laws and legal agreements governing software use. Failure to do so can lead to monetary damages and/or criminal penalties for the individual violator. Because such violations are also against University policies and rules, disciplinary action will be taken as appropriate. We, the members of the University of Florida community, pledge to uphold ourselves and our peers to the highest standards of honesty and integrity.

Student Privacy
There are federal laws protecting your privacy with regards to grades earned in courses and on individual assignments.   For   more   information,   please   see: http://registrar.ufl.edu/catalog0910/policies/regulationferpa.html

Recording
Students are allowed to record video or audio of class lectures. However, the purposes for which these recordings may be used are strictly controlled. The only allowable purposes are (1) for personal educational use, (2) in connection with a complaint to the university, or (3) as evidence in, or in preparation for, a criminal or civil proceeding. All other purposes are prohibited. Specifically, students may not publish recorded lectures without the written consent of the instructor.

A "class lecture" is an educational presentation intended to inform or teach enrolled students about a particular subject, including any instructor-led discussions that form part of the presentation, and delivered by any instructor hired or appointed by the University, or by a guest instructor, as part of a University of Florida course. A class lecture does not include lab sessions, student presentations, clinical presentations such as patient history, academic exercises involving solely student participation, assessments (quizzes, tests, exams), field trips, private conversations between students in the class or between a student and the faculty or lecturer during a class session.

Publication without permission of the instructor is prohibited. To "publish" means to share, transmit, circulate, distribute, or provide access to a recording, regardless of format or medium, to another person (or persons), including but not limited to another student within the same class section. Additionally, a recording, or transcript of a recording, is considered published if it is posted on or uploaded to, in whole or in part, any media platform, including but not limited to social media, book, magazine, newspaper, leaflet, or third party note/tutoring services. A student who publishes a recording without written consent may be subject to a civil cause of action instituted by a person injured by the publication and/or discipline under UF Regulation 4.040 Student Honor Code and Student Conduct Code.

Campus Resources:
Health and Wellness

> **U Matter, We Care:**
> If you or a friend is in distress, please contact umatter@ufl.edu or 352 392-1575 so that a team member can reach out to the student.
> **Counseling and Wellness Center:** http://www.counseling.ufl.edu/cwc, and 392-1575; and the University Police Department: 392-1111 or 9-1-1 for emergencies.
> **Sexual Assault Recovery Services (SARS)**
> Student Health Care Center, 392-1161.
> **University Police Department** at 392-1111 (or 9-1-1 for emergencies), or
> http://www.police.ufl.edu/.

Academic Resources

> **E-learning technical suppor**t, 352-392-4357 (select option 2) or e-mail to Learning-support@ufl.edu. https://lss.at.ufl.edu/help.shtml.
> **Career Resource Center**, Reitz Union, 392-1601. Career assistance and counseling. https://www.crc.ufl.edu/.
> **Library Support**, http://cms.uflib.ufl.edu/ask. Various ways to receive assistance with respect to using the libraries or finding resources.
> **Teaching Center**, Broward Hall, 392-2010 or 392-6420. General study skills and tutoring. https://teachingcenter.ufl.edu/.
> **Writing Studio, 302 Tigert Hall**, 846-1138. Help brainstorming, formatting, and writing papers. https://writing.ufl.edu/writing-studio/.
> **Student Complaints Campus**: https://www.dso.ufl.edu/documents/UF_Complaints_policy.pdf.
> **On-Line Students Complaints**: http://www.distance.ufl.edu/student-complaint-process.

Schedule:
The following schedule is an estimate of the course's progress, with **approximate** dates of the tests. The instructor will let you know when the tests and assignment deadlines are exactly as they approach, and will keep you updated if we go off track. Please regularly consult **the schedule on the course website** for updates.

Overview of the course, Fall 2023 **(subject to change!)**

Week/date	Topic
1 – *Aug 23*	Introduction to the course and to R; Descriptive statistics
2 – *Aug 30*	Introduction to inferential statistics
3 – *Sept 6*	Correlation
4 – *Sept 13*	Regression
5 – *Sept 20*	TEST 1
6 – *Sept 27*	Regression
7 – *Oct 4*	T-test
8 – *Oct 11*	Chi-square, graphing in R
9 – *Oct 18*	ANOVA
10 – *Oct 25*	TEST 2
11 – *Nov 1*	Mixed models
12 – *Nov 8*	Mixed models
13 – *Nov 15*	Mixed models
14 – *Nov 22*	NO CLASS
15 – *Nov 29*	Statistics: what it does and does not mean
16 – *Dec 6*	TEST 3; paper due (grads); optional: experimental participation due