

**STATISTICS FOR LINGUISTS**  
**LIN 4930- 15396; LIN 6932-15489**  
**SYLLABUS - SPRING Semester 2020**  
**T 7 (1:55-2:45) R 7+8 (1:55-3:50 pm)**  
**CBD 216**

**Instructor:**

Edith Kaan

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Office Hours: W 3:00-3:50; R 1:00-1:40pm, TUR 4127 and by appointment

**Prerequisites:** *Undergraduates:* LIN3010; *Graduates:* None

**Course description:**

This course gives an introduction to concepts of probability and statistics, with examples chosen mainly from linguistics. Topics include descriptive statistics, comparing means, regression, T-tests, linear mixed models, and basic experimental design.

**Objectives:**

- To learn how to interpret, evaluate, and write statistical results sections in linguistic research papers.
- To learn how to do basic data manipulation and statistical tests using R

**Text book:**

- Urdan, Timothy C. (2010). *Statistics in Plain English*. 3<sup>rd</sup> or 4<sup>th</sup> edition. Routledge. 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](http://uflib.ufl.edu), e-reserves or the course website.

**Software:**

Excel (Microsoft office); R ([www.r-project.org](http://www.r-project.org)); R-studio ([www.rstudio.com](http://www.rstudio.com)).

**Course website:**

Course materials (reading, lecture notes, syllabus, etc.) will be made available on the Canvas website on E-learning ([elearning.ufl.edu/](http://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	23%	38%
Tests (3)	60%	60%
Critique paper + data set analysis	15%	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 = < 56

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 and analysis report**

- 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.
- In addition, you may be getting a new data set which you will be asked to analyze and report the results from
- Due: in the last week of the semester.

#### **ALL STUDENTS**

##### **Homeworks and in-class exercises**

- Homework and in-class assignments are due every 1-2 weeks.
- Some of the homeworks may involve extra assignments for graduate students
- Made available through Canvas
- Homeworks should always be submitted individually

##### **Tests**

- There will be three tests over the course of the semester
- These tests are non-cumulative, although basic knowledge is assumed of what has been dealt with earlier in the semester (especially concerning R).
- Tests should always be submitted individually

##### **Active participation**

- Contributing to discussion in class
- Coming to class prepared
- Actively 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. A list of experiments that qualify for this credit can be found at <http://slhs.php.ufl.edu/student-info/participant-pool-2/>. This site will be updated throughout the semester. Please retain a copy of the IRB form as proof that you participated. 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 class. If you are currently enrolled in other classes that require participation in experiments, and your total participation requirement exceeds 4 hours this semester, please see the instructor.

### **Attendance Policy, Class Expectations, and Make-Up Policy**

- Students are required to hand in 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. Please also make sure you have at least one external backup of the assignments you make for this class. Computer problems will not be considered a valid excuse for missing deadlines.
- There will be no make-up exams or assignments without a documented excuse.
- If you are absent for more than one class, or miss more than 15 minutes of more than three 50-minute class periods without a documented medical or academic excuse, one point will be deducted from your final score for each additional time you are absent, leave early, or come late. Excused absences must be consistent with university policies in the Graduate Catalog (<http://gradcatalog.ufl.edu/content.php?catoid=10&navoid=2020#attendance>) and require appropriate documentation. Additional information can be found here: <https://catalog.ufl.edu/ugrad/current/regulations/info/attendance.aspx>

### **Students Requiring Accommodations**

Students with disabilities requesting accommodations should first register with the Disability Resource Center (352-392-8565, <https://www.dso.ufl.edu/drc>) by providing appropriate documentation. Once registered, students will receive an accommodation letter which must be presented to the instructor when requesting accommodation. Students with disabilities should follow this procedure 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>

## Campus Resources:

### Health and Wellness

#### **U Matter, We Care:**

If you or a friend is in distress, please contact [umatter@ufl.edu](mailto: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 support**, 352-392-4357 (select option 2) or e-mail to [Learning-support@ufl.edu](mailto: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](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, Spring 2020 (subject to change!)

<b>Week/date</b>	<b>Topic</b>
1 – Jan 7-9	Introduction to the course and to R; Descriptive statistics
2 – Jan 14-16	Introduction to inferential statistics
3– Jan 21-23	Correlation
4 – Jan 28-30	Regression
5 – Feb 4-6	TEST 1
6 – Feb 11-13	Regression
7– Feb 18-20	T-test
8 – Feb 25-27	Chi-square, graphing in R
9 – Mar 3-5	<b>NO CLASS</b>
10 – Mar 10-12	ANOVA
11 – Mar 17-19	TEST 2
12 – Mar 24-26	Mixed models
13 – Mar 31-Apr2	Mixed models
14 – Apr 7-9	Mixed models
15 – Apr 14-16	Statistics: what it does and does not mean
16 – Apr 21	TEST 3; paper due (grads); optional: experimental participation due