Syllabus – Fall 2024

Linguistics 258: Methods in Linguistic Research – Section 1

*** This syllabus is tentative and subject to revision at the instructors' discretion. ***

Although there will be some lectures, this is primarily an interaction-, discussion-, group work-based course. Be prepared to participate.

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Office locations:	January 206	Wilson 114
Office Hours:		Friday10:00 pm – 10:30 am and by appointment

Course Description: This course will introduce students to a range of formal, computational, and experimental tools for conducting linguistic research. Students will learn about different types of linguistic data, experimental design, and statistical techniques in the context of research in general linguistics, psycholinguistics, and sociolinguistics. This course aims to make students more capable readers of linguistic research (and scientific research more generally) and to provide them with hands-on experience in employing linguistic research methods. The course will also serve as an introduction to R for statistical computing. The class is intended for freshman and sophomore students who are considering advanced study in the linguistics program. Prerequisite: Ling 170D.

Text: Bodo, Winter. 2020. *Statistics for Linguists: An Introduction using R.* Routledge: New York. ISBN 9781138056091.

Assignments: There will be six (roughly bi-weekly) Assignments during the semester. The assignments will focus on tasks in R and will be due on the days indicated in the course schedule. Due to the nature of the assignments, they will be submitted electronically on Canvas, but will be due at the start of the class times on the days listed below. These will count for 25% of your final grade.

Participation and Group Assignments: 25% of your final grade will be based on participation and completion of (roughly 6) group assignments in class. Days of the group assignments will not be announced in advance. You may miss at most one group assignment and still get full credit.

Midterm Project: 25% of your final grade will be based on a midterm project requiring you to design and propose a linguistic experiment of your own. The experimental design should be reasonable and based on the course material, though you will not actually be conducting the experiment. More information will be given in class.

Final Presentation/Project: 25% of your final grade will be based on a final project and presentation consisting of a thorough analysis of some existing dataset as though it were your own research. More information will be given in class.

Attendance: Attendance is mandatory. If you need to miss class, you should let us know in advance. However, please do not come to class if you are experiencing COVID or flu symptoms or similar.

Grading: The grading scale used for calculating your final grade is as follows:

$97\% \leq A+ \leq 100\%$	$73\% \leq C < 77\%$
$93\% \leq A < 97\%$	$70\% \leq C- < 73\%$
$90\% \leq A- < 93\%$	$67\% \leq D+ < 70\%$
$87\% \leq B+ < 90\%$	$63\% \leq D < 67\%$

83% ≤ B < 87%
80% ≤ B- < 83%
77% ≤ C+ < 80%
60% ≤ D- < 63%
0% ≤ F < 60%

Grade Grubbing: "Grade grubbing" will not be tolerated. 5% will be deducted from your final grade for each occurrence. If you believe that a mistake has been made in the grading of a test or quiz, you may ask once for the instructors to reconsider the grade. Any further argument or pleading after the instructor has made a decision will be considered grade grubbing.

Reading and Assignment Schedule

(All chapter references refer to the Winter textbook listed above, other readings will be available as PDF as necessary.)

WEEK 1	
Monday, August 26	Syllabus; charts and graphs
Wednesday, August 28	R and R Studio basics
WEEK 2	
Monday, September 2	*Labor Day – No Class*
Wednesday, September 4	Mean, median, standard deviation, percentiles (Winter ch. 3) **Assignment 1 due**
WEEK 3	
Monday, September 9	Distributions: normal, standard, t (Winter ch. 3)
Wednesday, September 11	Research in R, experimental design
WEEK 4	
Monday, September 16	Central limit theorem
Wednesday, September 18	descriptive statistics (Winter ch. 3) **Assignment 2 due**
WEEK 5	
Monday, September 23	Correlation (Winter chs 4,5)
Wednesday, September 25	descriptive statistics (Winter ch. 3)
WEEK 6	
Monday, September 30	Sets and connectives (Partee et al chs 1, 6)
Wednesday, October 2	Plotting and dataframes **Midterm Project Due**
WEEK 7	
Monday, October 7	*Fall Break – No Class*
Wednesday, October 9	Linear models (Winter ch. 4) **Assignment 3 due**
WEEK 8	
Monday, October 14	Combinations and permuations
Wednesday, October 16	Linear models (Winter ch. 4)

WEEK 9	
Monday, October 21	Probability
Wednesday, October 23	Wordlist analysis **Assignment 4 due**
WEEK 10	
Monday October 28	Bayes Theorem
Wednesday, October 30	Correlation (Winter ch. 5)
WEEK 11	
Monday, November 4	Seeing Probability
Wednesday, November 6	Multiple regression (Winter ch. 6) **Assignment 5 due**
WEEK 12	
Monday, November 11	Probability Distributions
Wednesday, November 13	Categorical predictors (Winter ch. 7)
WEEK 13	
Monday, November 18	p-values
Wednesday, November 20	Inferential statistics (Winter chs. 9-10) **Assignment 6 due**
WEEK 14	
Monday, November 25	TBA
Wednesday, November 27	Thanksgiving Break – No class
WEEK 15	
Monday, December 4	**Final Project Presentations**
Wednesday, December 6	**Final Project Presentations**
TBA	**Final Project Due**