

LING 2550 Methods in Linguistics Research

Dr. Nick Danis, Washington University in St. Louis

<i>Course number</i>	LING 2550	<i>Instructor</i>	Nick Danis
<i>Semester</i>	Fall 2026	<i>Contact</i>	nsdanis@wustl.edu
<i>Time</i>	MW 11:30am-12:50pm	<i>Office</i>	January 206
<i>Location</i>	Somers 251	<i>Office hours</i>	Th 10:30-11:30am
<i>Website</i>	https://wustl.instructure.com/courses/178059		

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.

Goals

1. Understand and conduct a variety of statistical tests and models of linguistic data in R
2. Design and critique experimental designs relevant for linguistics
3. Wrangle and explore large amounts of data from such experiments

Required Materials

The following textbook is required:

- Bodo, Winter. 2019. *Statistics for Linguists: An Introduction using R*. Routledge. ISBN: 9781138056091

Readings

Readings are indicated on the schedule below. This schedule will be updated as the semester progresses. Any required readings not from the textbook will be available as PDFs on Canvas.

Software

All programming is done in R (<https://www.r-project.org/>) and we use RStudio (<https://posit.co/downloads>) as a programming environment. This software is free and cross-platform. Class time during the first week will be dedicated to ensure everyone has a working installation.

Attendance and delivery

In-person attendance is required for this course. However, be smart and put your health first. If you think you need to miss class for a health-related issue, please try to contact me **before** class time. Class sessions are not recorded by default, but if you have an extended, excused period of absence, arrangements can be made. Attendance is taken every session in some form. A single unexcused absence will not count against your grade, but anything more will require documentation.

Grade

The final grade is weighted as follows.

Category	Weight
Attendance & In-class Assignments	40%
Homeworks	40%
Final Project	20%

On about five different occasions during the semester, there will be an in-class activity that will be collected and graded as part of that category. These are not announced in advanced, though students with an excused absense will still have the opportunity to complete it.

The homework assignments are laregly from the Winter textbook, or made available on Canvas. The due dates are indicated below. Depending on the nature of the homework, it will either be submitted electronically or on Canvas.

The final project consists of taking existing, raw experimental data and conducting the appropriate analyses yourself, writing it up as though it were your experiment. More details will be given in class.

Schedule

Please see Canvas for all readings and assignment due dates. The schedule is likely to change specific to how the course progresses, below is only a rough guide.

Date	Day	Week	Topic	Reading	Due
8/24/2026	Mon	1	Syllabus, fundamentals	Winter ch. 1	
8/26/2026	Wed	1	R and R Studio	Winter ch. 2	
8/31/2026	Mon	2	Descriptive statistics	Winter ch. 3, Johnson ch. 1	
9/2/2026	Wed	2			HW1: Winter ch. 1 ex. 1, 3-6
9/7/2026	Mon	3	NO CLASS – Labor Day		
9/9/2026	Wed	3	Experimental design	Abbuhl et al. ch. 7	
9/14/2026	Mon	4	Significance testing	Winter ch. 9	
9/16/2026	Wed	4			HW2: Winter ch. 3 ex. 1-3
9/21/2026	Mon	5	Problems with significance testing	Winter ch. 10	
9/23/2026	Wed	5			
9/28/2026	Mon	6	Linear models	Winter ch. 4	
9/30/2026	Wed	6			HW3: Winter ch. 4 ex. 1-2
10/5/2026	Mon	7	NO CLASS – Fall Break		
10/7/2026	Wed	7			

Date	Day	Week	Topic	Reading	Due
10/12/2026	Mon	8	Linear regression and correlation	Winter ch. 5	
10/14/2026	Wed	8			
10/19/2026	Mon	9			
10/21/2026	Wed	9			HW4: Experimental Design Proposal
10/26/2026	Mon	10	Multiple regression	Winter ch. 6	
10/28/2026	Wed	10			
11/2/2026	Mon	11			
11/4/2026	Wed	11			HW5: Winter ch. 6 ex. 1
11/9/2026	Mon	12	Categorical predictors	Winter ch. 7	
11/11/2026	Wed	12			
11/16/2026	Mon	13			
11/18/2026	Wed	13	Case study: Syntactic judgements	Myers 2008	HW6: Winter ch. 7 ex. 2
11/23/2026	Mon	14			
11/25/2026	Wed	14	NO CLASS – Thanksgiving Break		
11/30/2026	Mon	15	Case study: Phonetics	Mackenzie et al 2018	
12/2/2026	Wed	15			
12/7/2026	Mon	16	Last Day of Class		
12/14/2026	Mon	17	Final Exams		Final Project

General policies

This course follows and takes seriously all policies on assault & harrassment, accommodations, academic integrity, and so on. In order to provide you with the most up to date material, I will link directly to the University guidelines below:

<https://provost.wustl.edu/syllabi-resources-and-template-language-danforth-campus/>

Please be familiar with these and don't hesitate to reach out if you ever have any related questions or concerns.

Academic Integrity

In all academic work, the ideas and contributions of others (including generative artificial intelligence) must be appropriately acknowledged and work that is presented as original must be, in fact, original. You should familiarize yourself with the appropriate academic integrity policies of your academic program(s).

Generative AI Use is Restricted Completely

It is vital to learn the fundamental concepts and develop the critical skills of our field without using outside aids. Part of that learning process involves thinking through and processing challenging material without any help from generative artificial intelligence (GenAI). Work produced by GenAI

typically reuses information and language from external sources without citation and thus the submission of any work created in whole or in part by GenAI tools cannot be considered to be original in our course setting. Keep in mind that coursework produced with GenAI could violate ethical standards as well. I therefore ask that you do not make use of any GenAI to help complete any work in this course. The use of GenAI in this course will be considered an academic integrity violation and would be referred to the university academic integrity process. Violations could potentially result in grade penalties, such as a zero on the assignment, and/or other university-level sanctions.

Unauthorized Recording And Distribution Of Classroom Activities & Materials

Except as otherwise expressly authorized by the instructor or the university, students may not record, stream, reproduce, display, publish or further distribute any classroom activities or course materials. This includes lectures, class discussions, advising meetings, office hours, assessments, problems, answers, presentations, slides, screenshots or other materials presented as part of the course. If a student with a disability wishes to request the use of assistive technology as a reasonable accommodation, the student must first contact the Office of Disability Resources to seek approval. If recording is permitted, unauthorized use or distribution of recordings is also prohibited.

Disability Resources (DR)

WashU supports the right of all enrolled students to an equitable educational opportunity and strives to create an inclusive learning environment. In the event a physical or online environment, learning activity, or learning interaction results in barriers to your inclusion due to a disability, please contact WashU's Disability Resources (DR) to engage in a process for determining and communicating approved accommodations. As soon as possible after receiving an accommodation from DR, send me your WashU Accommodation Letter. Because accommodations are not applied retroactively, initiate your request to DR prior to, or at the beginning of, the academic term to avoid delays in accessing accommodations once classes begin.

<https://disability.wustl.edu/>

Sexual Harassment And Assault

If you are a victim of sexual discrimination, harassment or violence, we encourage you to speak with someone as soon as possible. Understand that if you choose to speak to me as an instructor, I must report your disclosure to my department chair, dean, or the Gender Equity and Title IX Compliance Officer, which may trigger an investigation into the incident. You may also reach out to the Relationship & Sexual Violence Prevention (RSVP) Center to discuss your rights and your options with individuals who are not mandatory reporters.

<https://titleix.wustl.edu/students/confidentiality-resources-support/>

Religious Holidays

To ensure that accommodations may be made for students who miss class, assignments, or exams to observe a religious holiday, you must inform me in writing before the end of the third week of class, or as soon as possible if the holiday occurs during the first three weeks of the semester. For more information, please see the university's Religious Holiday Class Absence Policy (<https://bulletin.wustl.edu/washu/calendar/Religious-Holidays.pdf>).

Emergency Preparedness

Classroom and student safety will always come first. Students are reminded to review emergency preparedness and response actions at emergency.washu.edu and to familiarize yourself with the building(s) that you frequent. Know the layout, including exits, stairwells and the Emergency

Assembly Point (EAP). If an emergency occurs during class, we will stop instruction, assess the situation, and respond accordingly, including following any instructions provided in a WashU Alert message or noted on <https://emergency.washu.edu>. Additionally, to ensure receipt of all WashU Alerts, students should ensure contact information in Workday Student is current and download the WashU Safe App.

To report an emergency:

- Danforth Campus – (314) 935-5555
- School of Medicine Campus – (314) 362-4357
- North/West/South and Off Campus – 911 then (314) 935-5555

Resources for Students

WashU provides a wealth of support services that address academic, personal, and professional needs. To start exploring resources that can help you along the way, please visit: <https://provost.washu.edu/resources/instructor-resources/student-resources/>