

# Linguistics 98a: Group Tutorial

## ŁTŁX for linguists

---

*Fall 2024*

**Time:** Tuesday 3pm–5pm

**Location:** Boylston Hall 104

**Instructor:** Aljoša Milenković

aljosamilenkovic@g.harvard.edu

**Office hours:** Friday 3:30pm–4:30pm, Boylston G03

(or Zoom by appointment)

## 1 Course Description

Have you ever struggled with creating syntax trees and integrating them into your typed document? Do you find inserting IPA symbols and diacritics from an online keyboard inconvenient and time-consuming? Does spacing and alignment in glossed examples from languages other than English take too much effort? Does manual citation of the literature and writing up the list of references give you headache? And is all this effort to virtually no avail because the ultimate product does not look as nice and tidy as linguistics textbooks and papers? These are common setbacks for linguists and linguistics students who use standard typesetting software, such as MS Word, Google Docs and Apple Pages, to prepare their linguistics materials.

ŁTŁX is a typesetting system that operates on the TŁX programming language. ŁTŁX is widely used in science, including linguistics, owing its popularity to several factors. These include superior document aesthetics, convenient ways to collaborate and the automation of some excruciatingly repetitive aspects of scientific document preparation, such as mathematical typesetting, bibliography management and cross-referencing.

This practical course offers an introduction to ŁTŁX, with special emphasis on its use in linguistics. The course aims to enable students to use ŁTŁX for their linguistics assignments, research projects, term papers and theses, as well as beyond the field of linguistics. Following the introduction to TŁX coding and basic text formatting in ŁTŁX, we will cover a range of topics of interest to linguistics students, including but not limited to drawing constituency trees, glossing examples from less familiar languages, phonetic transcription and phonological rule notation. By the end of the course, students will be able to prepare their linguistics documents in ŁTŁX, combining the knowledge acquired in class and online resources. The course has the added benefit of providing students with transferable coding skills relevant outside linguistics.

## 2 Prerequisites

Students are expected to have taken one of the introductory linguistics courses, such as *Linguistics 83: Language, Structure and Cognition* or *Linguistics 101: The Science of Language*. Ideally, students should also have taken (or be taking) one of the following courses: *Linguistics 102: Sentence*

*Structure or Linguistics 105: Sounds of Language, Linguistics 106: Knowledge and Meaning.* No coding experience is assumed.

### 3 Requirements

Attendance & Participation	30% of the final grade
Assignments	70% of the final grade (five assignments; 14% each)

Attendance and participation: As required by the Department, attendance to classes is mandatory. A student will be penalized for not attending classes (−5% of the final grade for each missed class), unless they provide a valid reason for missing the class. Students are expected to contribute to class discussion by sharing their impressions about the class content, answering questions asked by the instructor and asking their own questions.

Assignments. There will be five assignments throughout the course. Assignments are due **in one week**. Students must submit their assignments before the next class, since each assignment will be briefly discussed in class. Failure to submit the assignment in time (or at all) will result in penalty (−14% of the final grade for each assignment). Extension is possible only under extraordinary circumstances. Resubmission is not possible. Collaboration is permitted (even encouraged), however, each student must submit the assignment individually. Collaborators must be acknowledged in the submission.

### 4 Resources and AI policy

There is no official textbook used in this tutorial. Students are encouraged to avail themselves of online resources, such as:

- StackExchange
- Overleaf  $\text{\LaTeX}$  Resources
- general  $\text{\LaTeX}$  tutorials (check this one out)
- individual package documentation
- Overleaf Linguistics Templates
- $\text{\LaTeX}$ /Linguistics Wikibooks community
- $\text{\LaTeX}$  and phonology

You are welcome to consult outside materials, including generative AI, but you should be aware of their limitations.

### 5 Accommodations for Students with Disabilities

Students needing academic adjustments or accommodations because of a documented disability must present their Faculty Letter from the Accessible Education Office (AEO) by the end of the second week of the term. Failure to do so may result in the Course Head's inability to respond in a timely manner. All discussions will remain confidential, though Faculty are invited to contact AEO to discuss appropriate implementation.

## 6 Schedule

Week 1 (September 10): An introduction to  $\text{\LaTeX}$

- Advantages and disadvantages of  $\text{\LaTeX}$
- Document classes
- Basic text formatting
- Citation
- Floats (tables and figures)
- **Assignment 1 distributed** (due before Week 2 class)

Week 2 (September 17): Syntax and semantics 1

- **Assignment 1 due before class**
- **Assignment 2 distributed** (due before Week 3 class)
- math mode
- numbered examples and interlinear glossing
- cross-referencing
- drawing syntax/semantics trees

Week 3 (September 24): Syntax and semantics 2

- **Assignment 2 due before class**
- **Assignment 3 distributed** (due before Week 4 class)
- in-class practice

Week 4 (October 1): Phonetics and phonology 1

- **Assignment 3 due before class**
- **Assignment 4 distributed** (due before Week 5 class)
- phonetics and phonology
- IPA transcription
- phonological rules: structural descriptions

Week 5 (October 8): Phonetics and phonology 2

- **Assignment 4 due before class**
- **Assignment 5 distributed** (due before Week 6 class)
- syllable trees
- features and feature geometry
- sound inventories: consonant and vowel charts

- diacritics

Week 6 (October 15): conclusion

- **Assignment 5 due before class**
- application in historical linguistics
- application in metrics and poetry
- concluding remarks