

Language

Ecole Normale Supérieure
Département d'Etudes Cognitives
Fall 2026

Instructor: Salvador Mascarenhas (salvador.mascarenhas@ens.fr)

office hours: by appointment and TBA

Teaching assistant: Claire Rong (claire.rong@ens.fr)

1 Classes

Lectures (*cours magistraux*): Mondays 10.30am to 12.30, usually in **Salle des Actes** on 45 Ulm, but there are some exceptions, see the MA planner.

TA sessions (*travaux dirigés*): Wednesdays 9.30am to 10.30 **or** Thursdays 9.30am to 10.30, room TBA.

2 Course description

This course is an introduction to the principled study of human natural language. Our chief interest and goal is to examine mathematically rigorous theories of (fragments of) the human cognitive capacity for language. To this end, we will introduce the fundamental concepts and theories in phonology, morphology, syntax, semantics, and pragmatics. We will discuss in some detail the philosophical foundations for the study of human language from this cognitive and mathematically intelligible perspective: Are all of the formal symbols that occur in our theories somehow *in the head*?

In less detail due to time constraints, we will also introduce classics and in some cases illustrate recent work on the neurobiological bases of human language (neurolinguistics), the specifics of how the human capacity for language is deployed by humans in language production and comprehension (psycholinguistics), how children learn their native language effortlessly and with no substantive instruction (language acquisition), and what the points of contact and divergence are between the human faculty for language and the impressive behavioral achievements of modern large language models.

3 Assessment

- weekly homework assignments (60%): I envision 8 assignments, but this is subject to change depending on whether we need to adjust the schedule;
- a final exam (30%): multiple-choice questions, brief linguistic analysis, short essay questions;
- participation in discussions in class and TD (10%): if you want to take this course for credit but cannot attend the TD please come speak with the instructor **as soon as possible**.

4 Textbook, readings, and course website

This course does not have a textbook. All information about the course, lecture slides, and homework assignments will be available on the course's *Moodle* page. Do not share your access credentials with anyone not taking this class, and do not share course materials or homework assignments.

5 Course policies

Attendance Regular attendance and punctuality are crucial to succeed in this course, and they are **mandatory** for all students registered for credit. This is important both for your individual success in this course, and for every other student's success. Keep in mind in particular that, by arriving late, you are jeopardizing your own but also your classmates' education by disrupting the flow of lectures. Practically speaking, if you are registered for credit then your grade will suffer from poor attendance or recurrent late arrivals. If you are not registered for credit, the same policy applies, though with different consequences: poor attendance or recurrent late arrivals may force us to ask you to stop auditing the course.

Participation You are strongly encouraged to participate in lectures and in TD. This means asking deep and challenging questions, but also asking simple questions, asking for clarification, saying "I'm just not getting this, please explain it in a different way," or "I'm lost, can you remind me why we're talking about this?" **You can ask questions in French at any time.**

Contacting the instructor and TA Email is the best way to contact us when you have brief questions. Please include both of us in your email and allow us 24 hours to respond (longer on the weekends). Beside the instructor's office hours, we are available to meet by appointment or to chat informally in the hallway. You should do your very best to ask all of your substantive questions about content **in person** (in class, in TD, during office hours). Email is a very inefficient way to discuss complex points from class or substantive questions about homework.

Homework All homework assignments are to be handed in **at the beginning of class** the day that they are due, in **hard copy**. If you cannot attend the lecture when an assignment is due you may send it by email to Claire, but (i) this cannot be done systematically and (ii) the same deadline applies as for hard copies. You can write up your answers in French or in English (NB you will never lose points for grammatical mistakes!), and preferably type up your submission. If you hand in all of the assignments, your lowest score will be factored out. Importantly if you do not hand in all of the assignments, your lowest score (namely 0) will **not** be dropped, and your grade will suffer accordingly. Naturally, exceptions will be considered on a case by case basis given adequately documented extraordinary circumstances.

Discussing assignments with classmates You are allowed (and to some extent encouraged) to discuss homework assignments with your classmates. However two things are required if you engage in substantive discussions of solutions: (i) you must indicate in your write-up the names of classmates with whom you discussed solutions in some depth, and (ii) you must write up your answers to the assignment by yourself. Under no circumstances are you to share typed-up answers to the assignments or to discuss the actual write-ups. Use this opportunity for collaboration with your classmates wisely: working with a classmate who is more comfortable than you on a particular topic can help you understand that topic better; working with a classmate who knows less than you about a particular topic can help you consolidate what you know and force you to reassess fundamental elements of your knowledge. You should always work in small groups, to make sure everyone has a chance to contribute substantively.

Academic honesty policy Cheating will not be tolerated and may cost you your grade as well as have deeper repercussions in your academic career. The following is a non-exhaustive list of examples of what counts as cheating in this course: (i) signing on the attendance sheet without attending the class (e.g. signing and leaving, or signing for someone else); (ii) copying the homework write-up or the exam answers of another student, with or without that student's knowledge; (iii) copying elements of your solutions of exercises from sources in the literature without giving them due credit.

6 Preliminary schedule

#	date	topics
1	September 21	Introduction to the cognitive study of language; language competence; brief introductions to phonology, morphology, syntax, semantics
2	September 28	Language (non-)variation: linguistic diversity and the question of universals; principles and parameters framework; first linguistic analyses
3	October 5	Morphology , language typology; first look at syntax
4	October 12	Syntax I constituent structure; selection and subcategorization; phrase-structure rules; complements and adjuncts
5	October 19	Syntax II subcategorization; X-bar theory; the inflectional phrase and verb movement
6	November 2	Semantics I first look at meaning; compositionality; entailment; presupposition; adjectives
7	November 9	Semantics II meanings in the head; the case for methodological solipsism; presupposition, pragmatics
8	November 16	Phonology phonetic macro classes; allophonic variation; optimality theory and loanword phonology
9	November 30	Language in the mind/brain; deficit-lesion method; functional brain imaging; psycholinguistics: parsing, reading, lexical access
10	December 14	Language and reasoning
11	January 11	TBD
12	January 18	Language and thought in minds vs. machines
13	January 25	Final exam in class