Theoretical and Experimental Linguistics and Phonetics (TELPh)

Semester 1	Semester 2
BLOC: Fundamentals of linguistics 1 (5 out of 6 UEs)	*BLOC: Fundamentals of linguistics 2 (4 out of 7 UEs)*
Phonetics	Phonological Analysis
Phonology	Experimental Phonology
Morphology	Theoretical Morphology
Syntax	Constraint-based syntax
Semantics	Topics in Minimalist Syntax
Linguistic typology	Semantic Analysis
BLOC: Skills in linguistics 1 (2 out of 3 UEs)	Pragmatics
Data and corpora	*BLOC: Skills in linguistics 2 (1 out of 2 UEs)*
Ethics and Experimental Design	Bases of Programming
Field Linguistics: Describing and documenting endangered languages	Introduction to Statistics
BLOC: Broadening 1 (2 out of 9 UEs)	*BLOC: Broadening 2 (2 out of 5 UEs)*
UE Transverse UPCité (UE Sport ou UE Engagement)	Tense, Aspect, Mood
UE LIBRE (External, Circle U, Smarts UP etc.)	Diachrony and Reconstruction
History of Linguistic Theories	Romance linguistics
La linguistique à la croisée des disciplines	Prosodic Analysis
Sino-Tibetan Languages	Language Acquisition
Sign language linguistics	*BLOC: Dissertation*
Psycholinguistics	M1 Thesis preparation
Language and Gender	Internship
BLOC: Dissertation	
M1 Thesis preparation	

Semester 3	Semester 4
BLOC: Fundamentals of linguistics 3 (5 out of 9 UEs)	*BLOC: Dissertation*
Topics in Phonological Theories	M2 Thesis
Advanced Morphology	
Topics in Prosody	
Experimental Syntax	
Advanced syntax: theory and research	
Advanced Semantics and Pragmatics	
Signal processing and computational methods for speech	
History and epistemology of linguistic sciences	
Topics in Chinese linguistics	
BLOC: Skills in linguistics 3 (1 out of 3 UEs)	
Corpora / Field linguistics (1 out of 2)	
Data and corpora	
Field Linguistics: Describing and documenting endangered languages	
Experimental Design (1 out of 1)	
Ethics and Experimental Design	
Statistics (1 out of 1)	
Advanced Statistics	
BLOC: Broadening 3 (2 out of list below)	
UE Transverse UPCité (UE Sport ou UE Engagement)	
UE LIBRE (External, Circle U, Smarts UP etc.)	
1 UE from Fundamental Linguistics 1 or 3	
1 UE from Broadening in Linguistics 1	
Speech Perception	
History of Linguistic Theories	
La linguistique à la croisée des disciplines	
East Asian Linguistics	
Meaning matters	
Sign language linguistics	
Language and Gender	
1 UE skills in linguistics 3	
BLOC: Dissertation	
M2 Thesis preparation	

Semester 1

Phonetics

1. Course description

This is an advanced course to further develop the knowledge and skills needed in experimental phonetics. We will explore the techniques of recording, speech analysis and experimental design. We will also discuss some current theories of speech production and perception.

The courses objectives are to

- Situate the field of experimental phonetics within the framework of linguistic studies.
- Study the acoustic properties of the speech signal in a cross-linguistic context.
- Acquire the techniques used in experimental phonetics: recording methods, acoustic and articulatory analysis to test linguistic hypotheses.

2. Prerequisites

Students will need basic knowledge of phonetics and

3. Learning outcomes

On successful completion of this course, students should be able to:

- Set up simple experiments using the experimental methods seen in class.
- Use speech analysis techniques to test phonetic hypotheses.
- Write a squib describing the experimental protocol of an experiment and its results.
- Discuss current issues in phonetic science.

Phonology

1. Course description

This course aims to introduce you to a subset of problems addressed in theoretical phonology with the aim to give you a solid understanding of these problems, to give you an overview of the proposed solutions and to develop a solid mastery of some important formalisms. After a basic introduction of how to conduct a phonological analysis, how to identify phonemes and allophones, we delve into generalisation of processes across multiple phonemes and use distinctive features to account for various patterns. We also look at specific case studies exploring morphophonological alternations and accounting for generalisation. At the end of the course, it should be relatively easy for you to give an explicit and formal analysis of new data such as those seen in class, to express their potential relevance to our understanding of phonological cognition, and the challenges they pose to certain theoretical ideas, based on a thorough understanding of the theories discussed in

class. We will look at challenges to phonological theory through important articles in the field, which will enhance your understanding of new directions of research in phonology.

2. Prerequisites

Students will need basic knowledge of phonetics and ideally to have followed an introductory course in Phonology (even if the first few sessions will be dedicated to revisions of basics of phonological analyses)

3. Learning outcomes

On successful completion of this course, students should be able to:

- Describe and analyse a subset of phonological data using various theoretical approaches discussed in class
- Build argumentation towards a proposed solution
- Critically evaluate the solutions offered by the various approaches
- Understand of the implications of a proposed analysis and its relevance to our understanding of phonological cognition
- Explore distinctive features' account and how it allows to describe generalisations
- Evaluate specific case studies by looking at morphophonological alternations
- Having a critical eye based on new directions of research in phonology

Morphology

1. Course description

Morphology can be defined as the study of the internal structure of words and the way words relate to one another: for instance, the words "cognitive" and "cognition" are morphologically related in a specific way.

The purpose of this course is to provide a broad introduction to morphology as an empirical domain, based on data from very diverse languages. We will cover basic concepts of morphological analysis, provide a basic introduction to morphological theory, and discuss the nature and organization of inflection, derivation, and compounding. Special attention will be paid to the typological diversity of morphological systems.

2. Prerequisites

There are no prerequisites: students with no prior knowledge of morphology are very welcome.

A basic introduction to general linguistics (basics of phonology, morphology, syntax) will be helpful but is not required.

3. Learning outcomes

On successful completion of this course, students should be able to:

- Segment words into morphs by comparison with related words
- Make sense of the interplay between diachronic and synchronic aspects of the analysis of a word.

- Identify types of morphophonological relatedness (affixation, infixation, reduplication, root-and-pattern morphology, suprasegmental morphology, etc.) and discuss edge cases
- Identify types of morphological relations (conversion, derivation, compounding, inflection, etc.) and discuss edge cases
- Make sense of the structure of a morphological system in any language

Syntax

1. Course description

The course presents an introduction to the scientific approach to language and syntax.

It shall focus on the three key properties that characterise natural languages, i.e., recursion, hierarchy, and displacement. For each of them, issues concerning invariants and variation, possible cognitive explanations and theoretical modelling will be addressed and discussed.

2. Prerequisites

The course is conceived as an introduction and shall be able to accommodate both motivated beginners, and students with some knowledge of syntactic analyses. The training sessions will be organised progressively, so that the two groups of students should be able to get a training appropriate to their level/needs.

3. Learning outcomes

On successful completion of this course, students should be able to:

- perform simplex and more complex syntactic analyses (tree diagrams) in core linguistic phenomena
- compare and assess major hypotheses and models concerning word order variation, displacement and hierarchy
- formulate and operationalise a research question on theoretical syntax

Semantics

1. Course description

Meaning is one of the most obvious features of language, but also one of its most intangible and complex aspects to study. Formal semantics is the branch of linguistics that studies the meaning expressed by the elements of a language and the interpretation of the expressions that result from their combinations. We will be setting up a number of basic tools for formally representing the meaning of complex expressions, and look at some specific phenomena.

2. Prerequisites

There are no prerequisites. The course is open to students with no prior knowledge of semantics. A basic introduction to general linguistics is helpful but not required.

3. Learning outcomes

On successful completion of this course, students should be able to:

- identify how the parts of a sentence are integrated, which is the basis for understanding its meaning (compositional hypothesis),
- perform simple and more complex semantic analyses (formulae) in core types of phenomena

Linguistic typology

1. Course description

This course provides a general introduction to accounting for the diversity of languages in linguistic analysis. It consists of two types of sessions. In the CM sessions, we will explore how the languages of the world implement certain categories of linguistic analysis in their grammar, focusing on the following selected topics: - introduction in linguistic typology, universals, parts of speech-systems, case marking, syntactic alignment, argument indexes, relativization, nominalization and subordination and valency operations. In the practical sessions (TD), we will examine in detail how a language unknown to the students applies these same concepts. The course is primarily focused on morphosyntax. The students may choose two languages: the primary language they study, which they are familiar with, such as their native language if it is not one of the common Western European languages (e.g., not Spanish, English, French, or German). The second language must be one they are unfamiliar with and not related to their mother tongue or the language they speak or study, preferably from a different continent.

2. Prerequisites

None

3. Learning outcomes

On successful completion of this course, students should be able to:

- The student is expected to apply the theoretical foundation as explained during the CM sessions in the assignments, the presentation, and the final project.
- The student must demonstrate familiarity with the methodology and tools for typological research, such as Ethnologue, the WALS database, and the Leipzig glosses.
- The student must be able to theoretically substantiate a chosen topic, using the relevant literature. Through the chosen case study, the student demonstrates the ability to apply this theoretical framework.
- The student is expected to demonstrate scientific skills in the presentation and the final project, such as correct citation, paraphrasing, summarizing, analyzing, and referencing sources.

BLOC: Skills in linguistics 1

(2 out of 3 UEs)

Data and corpora

1. Course description

Corpus Linguistics studies language using systematically organized collections of spoken and written texts, known as corpora. This course provides foundational knowledge of corpus linguistics, focusing on oral and written corpora. Key topics include the definition and evolution of corpus linguistics, types of corpora (written and oral), and principles of corpus design such as sampling, balance, and ethical considerations. Students will explore analytical tools for quantitative and qualitative studies of linguistic patterns (using large-scale corpora in well-documented languages – English, in particular) and learn about applications in linguistic description / data collection, corpus constitution & annotation, in field situation and in the lab. The course highlights differences between oral and written corpora, as well as challenges in analyzing spoken data, and data maintenance.

2. Prerequisites

None

3. Learning outcomes

On successful completion of this course, students should be able to:

- Constitute oral and written corpora
- Annotate, analyze and maintain them
- Use existing large-scale corpora tools to conduct quantitative studies of specific phenomena

Ethics and Experimental Design

1. Course description

This course aims to equip students with the skills required to build a robust experimental design in psycholinguistics. We will first be looking at the steps required to build an experiment, to formulating a hypothesis and a research question, to determining factors impacting on an experiment (from internal to external factors). We will look then briefly at some examples of experiments in both production, perception and comprehension before thinking about the population to be tested, and the items to use in an experiment. We will consider some issues related to building and running an experiment. We will then build various types of experiments using PsychoPy and other platforms. Ethical considerations will be covered at various stages guiding students towards submitting their ethics application, if required, for their research design. Notions of statistics will be discussed with supporting documents provided.

2. Prerequisites

None

3. Learning outcomes

On successful completion of this course, students should be able to:

- Understanding of how to design a psycholinguistic experiment
- Understanding the impact of choices made in experimental designs on outputs

- Understanding role of reproducibility and transparency in research and having an ethical study

- Understanding of key issues related to building and running an experiment

- Application of psycholinguistic methods in designing various types of experiments using psychoPy.and other platforms

- Understanding the type of statistical techniques adapted to their data

- Understanding ethical considerations to apply to their own research activity

Field Linguistics: Describing and documenting endangered languages

1. Course description

This course introduces the principles and methods of linguistic fieldwork. It consists of two interwoven components: one which presents the theory and methods of documentation of (mainly endangered) languages, and another practical component, in which we will apply these concepts to the description of a language.

Working with a language consultant (a speaker of a language unknown to the students and instructor), we will collect language data in order to develop an analysis of the language's phonology, morphology and syntax.

2. Prerequisites

Sufficient familiarity with phonetics/phonology to transcribe and analyse data in an unknown language

3. Learning outcomes

On successful completion of this course, students should be able to have:

- An understanding about the goals, methods, issues and outcomes of the field of linguistics devoted to documenting and preserving languages.
- A practical methodology for eliciting and analyzing data from a speaker
- An awareness of issues surrounding language endangerment
- A general knowledge about linguistic diversity and its importance

BLOC: Broadening 1

(2 out of 9 UEs)

UE Transverse UPCité (UE Sport ou UE Engagement)

UE LIBRE (External, Circle U, Smarts UP etc.)

History of Linguistic Theories

1. Course description

This course aims to provide a general overview of the development of linguistic theories, mainly focusing on grammars and dictionaries and the formation of linguistic tools in the Western tradition, particularly since the Greco-Roman Antiquity. It draws on a selection of foundational texts from Antiquity, the Renaissance, the grammatisation of European vernacular languages, and, simultaneously, the documentation of non-European languages worldwide (16th-18th centuries) and the birth of comparative linguistics or comparative grammar (19th century). Secondly, this course also offers an initial insight into other descriptive traditions worldwide, such as the Arabic, Hebrew and Chinese grammatical traditions, and the 'circulation of linguistic knowledge' in Europe (in particular, the dissemination of knowledge about Asian languages during the 16th-19th centuries, such as Chinese, Vietnamese, and Japanese). In particular, it examines how the discovery of non-Western languages during the early modern period and the 19th century contributed to shaping linguistic theory development further.

2. Prerequisites

None

3. Learning outcomes

On successful completion of this course, students should be able to:

- Apply the theoretical foundation (The Greco-Latin framework and the concept of "Grammaire latine étendue) as explained during the CM sessions in the assignments, the presentation, and the final essay.
- Demonstrate familiarity with the methodology and tools for research in the field of the History of Language Sciences.
- Theoretically substantiate a chosen topic, using the relevant literature. Through the chosen case study, the student demonstrates the ability to apply this theoretical framework.
- Demonstrate scientific skills in the presentation and the final project, such as correct citation, paraphrasing, summarizing, analyzing, and referencing sources.

La linguistique à la croisée des disciplines

1. Course description

The course will analyze a variety of questions central to linguistics both from a diachronic and an epistemological perspective. The development of linguistic thinking will be examined in the light of its interactions with other phenomena (such as the evolution of writing systems and their different features, the birth and development of philological practices in Antiquity, the development of logic and philosophy), as well as other scientific disciplines (philology, mathematics, ethnology, sociology, poetics, natural sciences, cognitive sciences, computer sciences…).

Le cours analysera une variété de questionnements linguistiques dans une perspective à la fois diachronique et épistémologique. Le développement des idées linguistique sera examiné à la lumière de ses interactions avec d'autres phénomènes (tels que l'évolution des systèmes d'écriture et de leurs différentes caractéristiques, la naissance et le développement des pratiques philologiques dans l'Antiquité, le développement de la logique et de la philosophie), ainsi qu'avec d'autres

disciplines scientifiques (philologie, mathématiques, ethnologie, sociologie, poétique, sciences naturelles, sciences cognitives, sciences de l'informatique...).

2. Prerequisites

None

3. Learning outcomes

On successful completion of this course, students should be able to:

- Place a number of relevant moments in the history of linguistic theories within their broader historical and epistemological contexts.
- Establish meaningful connections between the methodologies and the production of knowledge proper to linguistics and to other disciplines over time.

A la fin de ce cours, les étudiant·e·s devraient être capables de :

- Situer un certain nombre de moments importants de l'histoire des théories linguistiques dans leur contexte historique et épistémologique.
- Être en mesure d'établir des liens substantiels entre la linguistique et à d'autres disciplines dans leurs méthodologies et dans leur production des connaissances à travers le temps.

Sino-Tibetan Languages

1. Course description

The course is designed to provide an overview of the Sino-Tibetan language family, its major branches and representative language varieties. After examining the typological features of the main languages of the family, part of the course will be devoted to the study of language varieties that have emerged through long-term contact between Chinese and Tibetan speakers, as well as other languages spoken in northwestern China.

Le cours a pour objectif de présenter une vue d'ensemble de la famille des langues sino-tibétaines, de ses principales branches et de ses variétés les plus représentatives. Après une description des caractéristiques typologiques des principales langues de la famille, une partie du cours sera consacrée à l'examen de variétés langagières ayant émergé suite à un contact prolongé entre locuteurs de chinois et de tibétain, ainsi que d'autres langues parlées en Chine du Nord-Ouest.

2. Prerequisites

The course relies on the basic linguistic concepts acquired in the first year of the Master's program. No knowledge of the studied languages is necessary. The course will be taught in English or in French according to the needs of the students.

Le cours s'appuie sur les concepts linguistiques de base acquis en première année de master. La connaissance d'aucune des langues étudiées n'est requise. La langue d'enseignement sera l'anglais ou le français en fonction des besoins des étudiant·e·s.

3. Learning outcomes

By the end of this course, students should be able to:

- Roughly locate the branches and representative varieties of the Sino-Tibetan family on a geographical map;
- Describe the general typological characteristics of representative languages of the Sino-Tibetan family;
- List linguistic areas that are susceptible to change through prolonged linguistic contact.

À la fin de ce cours, les étudiant·e·s devraient être capables de :

- Situer approximativement sur une carte géographique les branches et les variétés représentatives de la famille sino-tibétaine ;
- Décrire les caractéristiques typologiques générales des langues représentatives de la famille sino-tibétaine ;
- Dresser la liste des domaines linguistiques susceptibles d'être modifiées par un contact linguistique prolongé.

Sign language linguistics

1. Course description

This course is an introduction to sign language linguistics. It shall give an overview of how sign languages are similar to spoken language and how they are different, and highlight how studying languages in the visual modality can widen and inform our understanding of the human language faculty. Topics will include: sign language phonetics and phonology, morphology, syntax, semantics; sign and gesture; grammaticalisation and diachrony; neural representation and psycholinguistic aspects; acquisition and emergence of sign languages; bimodal bilingualism; sign language and Deaf education; sign language and Deaf rights.

2. Prerequisites

The course is conceived as an introduction to sign language linguistics, and has no prerequisites, except an open mind and a genuine interest.

3. Learning outcomes

On successful completion of this course, students should be able to:

- be able to read most literature on sign language linguistics
- be aware of the societal, ethical, educational, political issues at stake with sign languages
- have some knowledge of LSF and other related sign languages

Psycholinguistics

1. Course description

The psycholinguistics course aims to give the necessary background to understand how experimental techniques initially coming from psychology and neurosciences can be integrated to answer typical questions in linguistics - and also why this is a very valuable approach. This includes an introduction to different types of research questions that can be tackled with different kinds of techniques, some background in basic ideas of hypothesis testing, but also questions of ethics and

the general scientific method underlying this kind of research. Students will develop research questions to apply this newly acquired knowledge in small scale research projects.

2. Prerequisites

Some background knowledge in general linguistic questions that allow students to develop an interesting research hypothesis.

3. Learning outcomes

On successful completion of this course, students should be able to:

- Learn how to approach a linguistic question using methods from cognitive psychology and neuroscience
- Learn basic concepts of Experimental Linguistics: Experimental Design and Inferential Statistics: Why do we use these techniques in linguistic research and how do we do this?
- Generate a linguistic hypothesis and apply the newly learned concepts to a small-scale research project
- Acquire a certain level of independence to develop your own projects for your Master's theses

<u>Language and Gender</u>

1. Course description

The class teaches grammatical gender systems in their typological, psychological and social aspects. More specifically. We will study the typology of grammatical gender systems in a wide variety of languages (how many genders, predictability of gender assignment to nouns, gender agreement) as well as the referential biases associated with grammatical genders.

We will also discuss the link between grammatical gender and social gender, recent evolutions of pronouns in European languages (new words or new morphological paradigm cells), closest conjunct agreement, particularly in the Romance languages. We will also deal with recent evolution in 21st century of Western languages with proposals for a less androcentrist communication.

2. Prerequisites

An introduction to morphology, syntax and/or language typology is not required but will be helpful.

3. Learning outcomes

On successful completion of this course, students should be able to:

- Identify the major gender systems in the world's language
- Discuss the predictability of grammatical gender
- Discuss the interpretability of grammatical gender
- Identify the major gender agreement types (in European languages)
- Identify the major innovations in gender neutral communication
- Discuss the relationship between social and grammatical gender

M1 Thesis preparation

1. Course description

In this methodological class, we will work on different elements that can facilitate the preparation and the writing of a M1 thesis on theoretical or experimental linguistics.

We will cover some of the following subjects:

- The research environment in France
- Doing a PhD program in linguistics
- Formulating research questions and hypotheses
- Citing documents and plagiarism
- The scientific writing
- Some tools such as Zotero or Overleaf will be also presented during class.

2. Prerequisites

None

Semester 2

BLOC: Fundamentals of linguistics 2

(4 out of 7 UEs)

Phonological Analysis

1. Course description

This course studies phonological representations in the theoretical model of **Autosegmental phonology**.

We begin by studying phonological processes at the suprasegmental level: *tone, the syllable, the mora, stress, the metrical foot.*

In the second part of the course we turn to autosegmental representations as applied to segments through the model of **Feature geometry**.

The final part of the course examines how Autosegmental phonology introduces the notion of constraint, opening the way to a new formal model, based on a system of phonological constraints: **Optimality theory**.

2. Prerequisites

An introduction to phonology is required

3. Learning outcomes

On successful completion of this course, students should be able to:

- Learning to describe and analyze a set of phonological data under different theoretical models;
- Understanding the implications of the proposed analysis for phonological cognition;
- Learning to critically evaluate the proposed solutions in the context of the models used.

Experimental Phonology

1. Course description

This course aims to introduce you to experimental and laboratory-based approaches to phonology. Laboratory Phonology emerged in the 90s as an integrated and multidisciplinary approach to investigating human sound systems. By integrated and multidisciplinary approach, we mean various experimental approaches, e.g., phonetic sciences, sociolinguistics, psycholinguistics, psychophysics and psychoacoustics, language acquisition, speech and hearing sciences, computations methodologies, machines learning, etc. Some readings will be essential to strengthen and enhance understanding of laboratory approaches to phonology and the TD/TP sessions will be dedicated to learning and applying experimental techniques in both production and perception in addition to manipulating the speech signal to answer specific research questions. All of these techniques we allow students to gain insights into this integrated approach and its role in informing phonological theory.

2. Prerequisites

Ideally, students will need basic knowledge of phonetics and phonology

3. Learning outcomes

On successful completion of this course, students should be able to:

- Understand key notions covered in Laboratory and experimental phonology

- Understand key experimental techniques used when dealing with experimental data from production, perception and processing of speech

- Use of key software for data processing (Praat, VoiceSauce, Correlator)

- Evaluate the application of psycholinguistic methods in perception experiments (Praat and PsychoPy), in addition to psychoacoustic representation of speech; additional readings will look specifically at using EEG, ERPs and visual world paradigm for online processing,

- Evaluate the application of advanced statistical techniques (from traditional methods to machine learning) as a framework to guide laboratory phonology studies.

Theoretical Morphology

1. Course description

Morphology can be defined as the study of the internal structure of words and the way words relate to one another: for instance, the words "cognitive" and "cognition" are morphologically related in a specific way.

The purpose of this course is to introduce students to key theoretical frameworks for the linguistic study of morphology, and make them fluent in the design and criticism of formal analysis of morphological systems. After discussing the big theoretical divides in the study of morphology, it will provide a detailed introduction to one or two formal frameworks in theoretical morphology, with applications to the inflection system of various languages.

2. Prerequisites

Broad knowledge of the empirical domain of morphology is assumed, such as is provided e.g. by the S1 class "Morphology".

Students without such knowledge can be enrolled on a case-by-case basis, and will be guided to autonomous training to be able to catch up.

3. Learning outcomes

On successful completion of this course, students should be able to:

- Make sense of the structure of a morphological system in any language
- Design a formal analysis for a small morphological fragment
- Assess critically research proposals in theoretical morphology
- Read contemporary literature in theoretical morphology

Constraint-based syntax

1. Course description

The class teaches constraint-based syntax which has proved useful for a wide variety of languages, as well as computational linguistics and psycholinguistics, focusing on Head-driven Phrase structure Grammar (Pollard & Sag 1994, Müller et al 2021). It presents feature structures and type hierarchies, for words and syntactic structures. It discusses lexicalism (words as basic syntactic units) and constructions (non-compositional syntax-semantic pairings). It presents crosslinguistic generalizations about categories, functions and positions and shows how to write grammar fragments for various languages with explicit formal constraints.

2. Prerequisites

An introduction to syntax and/or language typology is not required but will be helpful.

3. Learning outcomes

On successful completion of this course, students should be able to:

- Analyze the major syntactic phenomena of English and unrelated languages (valence, valence alternation, agreement, subordination, long-distance dependencies, anaphora, coordination)
- Distinguish categories, functions, positions and semantic roles
- Draw syntactic trees and graph representations (attribute value matrix)
- Write grammar fragments for unknown languages
- Use a type hierarchy for syntax and semantics

Topics in Minimalist Syntax

1. Course description

The aim of this class is to reflect on a number of problems that have been central to the developing of recent syntactic theories and are still matter of great debate. In the first part of the course, we shall focus on three such problems: islands, the role of features in driving syntactic derivations, adjunction. In the second part, each student will choose one other theoretical problem and shall present it) in an abstract that will be peer reviewed in class; b) in an oral presentation that shall be discussed; c) in a final paper, that will be graded and peer reviewed. On each problem to be discussed, we shall take a theoretical and an empirical/experimental stance, including 1) a survey and assessment of the theoretical proposals that have been made and their problems; 2) an exploration of their cross linguistic validity; 3) the setting of some experimental guidelines on how to progress on the relevant issue.

2. Prerequisites

The course is conceived as a natural prosecution of Syntax, and it thus presupposes a good master of the basics of Minimalist syntactic theory and analytical tools.

3. Learning outcomes

On successful completion of this course, students should be able to:

- write an academic abstract, a short academic paper on a theoretical problem and present and discuss it orally;

- have a good knowledge of the major debates in contemporary theoretical syntax, the issues at stake, their methodological options, their typological coverage.

- participate in collaborative research with a good master of the tenets of fair anonymous constructive reviewing

Semantic Analysis

1. Course description

Meaning is one of the most obvious features of language, but also one of its most intangible and complex aspects to study. Formal semantics is the branch of linguistics that studies the meaning expressed by the elements of a language and the interpretation of the expressions that result from their combinations. The aim of this class is to consolidate fundamentals and lead students into start conducting their own research in semantics.

2. Prerequisites

Basic knowledge of theoretical semantics is assumed, such as is provided e.g. by the S1 course "Semantics".
Students without such knowledge can be enrolled on a case by case basis.

3. Learning outcomes

On successful completion of this course, students should be able to:

- read contemporary literature in theoretical semantics and pragmatics

- master the fundamentals in theoretical semantics

Pragmatics

1. Course description

This course deals with all aspects of meaning that go beyond the propositional content of the utterance. In order to interpret such meanings, the linguistic and extra-linguistic context in which the utterance is produced must be taken into account, as well as the speaker and hearer's shared knowledge. Another aspect that has to be considered is the speaker's attitude or emotions towards the content of their own message or the speech act itself. More generally, the aspects of meaning dealt with in this class must be interpreted under the light of language *use* in a specific situation. Topics that will be addressed are: speech acts, conversationally or conventionally driven inferences, information and discourse structure, contrast, meaning relations between utterances and between discourse segments.

2. Prerequisites

The students have attended the course Semantics as part of the required courses of the first semester. Having also followed the class 'Meaning matters' is a plus.

3. Learning outcomes

On successful completion of this course, students should be able to:

- identify the boundaries (or lack thereof) between semantics and pragmatics and distinguish between different levels of meaning (truth-conditional, illocutionary, context-dependent, etc.);
- recognize the linguistic cues that trigger pragmatic meanings;
- understand different theoretical views to some pragmatic phenomena;
- present a personal research work to the class, answer potential questions from the audience.

BLOC: Skills in linguistics 2

(1 out of 2 UEs)

Bases of Programming

1. Course description

This course aims at introducing the basics of programming covering essential topics, such as variables, functions, iterations, conditioning, etc. We will look at the structure of databases and the various functions required to manipulate and analyse various types of corpora

2. Prerequisites

None

3. Learning outcomes

On successful completion of this course, students should be able to:

- Gain knowledge of using a programming language to manipulate corpora
- Learn the various essential topics required for manipulating a dataset,
- Understand and apply skills learned in class

Introduction to Statistics

1. Course description

This introductory course on statistics for linguists aims to provide the foundational knowledge needed to understand when and how to use statistical tools to address linguistic questions. Through concrete examples from linguistics, students will explore core statistical principles, including: datasets/corpora (variables, observations, ...), descriptive statistics (mean, variance, correlation, ...), point and interval estimation, linear regression and statistical tests. The course focuses on making these concepts accessible and directly applicable to linguistic data analysis. No prior knowledge of statistics is required, and the emphasis is on an intuitive and practical approach.

2. Prerequisites

None

3. Learning outcomes

On successful completion of this course, students should be able to:

- When and how use statistics to answer a linguistic question
- Report and analyze results of an experiment
- Understand the main concepts of statistics

BLOC: Broadening 2

(2 out of 5 UEs)

Tense, Aspect, Mood

1. Course description

The course aims to provide an overview of the related notions of tense, aspect and mood, both at the theoretical level, by examining formalization proposals by various researchers (such as Z. Vendler, H. Reichenbach, C. Smith, B. Comrie, W. Klein...), and at the practical level, by examining how tense, aspect and mood are realized in several languages. The languages studied will include English, Mandarin Chinese and French, as they have different ways of realizing these concepts, both grammatically and lexically. At the end of the semester, an application of the relevant linguistic concepts and formalisms to the teaching of French as a foreign language will be discussed.

Le cours donnera une vue d'ensemble des notions de temps, d'aspect et de mode, à la fois au niveau théorique, en examinant les propositions de formalisation de divers chercheur·e·s (tels que Z. Vendler, H. Reichenbach, C. Smith, B. Comrie, W. Klein...), et au niveau pratique, en examinant la façon dont le temps, l'aspect et le mode sont réalisés dans plusieurs langues. Les langues étudiées

seront l'anglais, le chinois standard et le français, toutes trois réalisant ces concepts de manière différente, à la fois grammaticalement et lexicalement. A la fin du semestre, une application à l'enseignement du français langue étrangère des concepts et formalismes linguistiques pertinents sera discutée.

2. Prerequisites

The course relies on basic linguistic notions such as those acquired during the 1st semester of the Master's programme. It is accessible to both French and English speakers. It is not necessary to know Mandarin Chinese.

Le cours s'appuie sur des notions basiques de linguistique telles qu'étudiées au premier semestre du Master. Il est accessible aux francophones et aux anglophones. Aucune connaissance de la langue chinoise n'est requise.

3. Learning outcomes

At the end of this course, students should be able to:

- Determine what belongs to tense, aspect and/or mode among the grammatical and lexical phenomena of French, English and Mandarin Chinese;
- Extrapolate this knowledge to the analysis of other languages on which they are working;
- Have reference material for making pedagogical choices in the teaching of these phenomena in a foreign language.

À l'issue de ce cours, les étudiant·e·s devraient être capables de :

- Déterminer ce qui relève du temps, de l'aspect et/ou du mode parmi les phénomènes grammaticaux et lexicaux du français, de l'anglais et du chinois standard ;
- Extrapoler ces savoirs à l'analyse d'autres langues sur lesquelles portent leurs recherches ;
- Avoir des éléments de référence pour faire des choix pédagogiques dans l'enseignement de ces phénomènes en langue étrangère.

Diachrony and Reconstruction

1. Course description

The course "Historical Linguistics and Reconstruction: Romance Languages (Diachrony and Reconstruction)" consists of two main parts:

- The principles of historical-comparative linguistics and the historical linguistics of Romance languages.
- Characterization of the history and typology of Romance languages (with reading and commentary on ancient texts).

Languages covered during the CM-sessions: Late Latin, Mozarabic, Judeo-Spanish, Spanish, French, Italian, and Portuguese.

- Reconstruction of forms in comparative grammar.
- Principles of diachronic linguistics.

The TD session concentrate on the input of the students (assignments and presentations). The students must make a choice from a Romance language that is generally less well-known, often minority languages, such as Aragonese, Gascon, Gallo, Aromanian, Sicilian, Romansh, etc.).

2. Prerequisites

None

3. Learning outcomes

On successful completion of this course, students should be able to:

- The aim is not to provide a synchronic description of the features of this language, but rather the primary objective is to describe the historical development of several phonological, (morpho)syntactic, or lexical evolutions or changes—in short, a diachronic approach is central. Students are also required to choose a second Romance language for comparison.
- The student must demonstrate familiarity with the methodology and tools for research in the field of Historical Linguistics.
- The student must be able to theoretically substantiate a chosen topic, using the relevant literature. Through the chosen case study, the student demonstrates the ability to apply this theoretical framework.
- The student is expected to demonstrate scientific skills in the presentation and the final project, such as correct citation, paraphrasing, summarizing, analyzing, and referencing sources.
- The student is expected to apply the theoretical foundation analyzing old Romance texts (one of the following subfields has to be chosen: phonology, morphology, syntax, lexicon).

<u>Romance linguistics</u>

1. Course description

After a brief summary of the historic setting that determined the appearance of Romance languages as a result of the evolution of Latin, and an overview of the main typological characteristics of this language family, we will make a close comparative analysis, among some Romance languages, of a set of constructions and phenomena that are particularly interesting from the point of view of this language family, such as negation, auxiliary selection, questions, discourse markers, and word order (via the analysis of constructions such as dislocations, clefts, or subject inversion).

2. Prerequisites

None

3. Learning outcomes

On successful completion of this course, students should be able to:

- recognize typical traits of the Romance-language family, as well as the main traits of specific Romance languages;
- describe and compare Romance languages with respect to the phenomena seen in class, focusing in particular on their interpretation and (if the case) their pragmatic function;

- present a personal research work to the class, answer potential questions from the audience.

Prosodic Analysis

1. Course description

The goal of this course is to introduce students to the domain of prosody. We will focus on identifying and describing prosodic patterns by analyzing the phonetic forms of prosodic contours in different languages, as well as their functions in interaction with syntax, discourse, emotions, and attitudes.

Students will learn how to explain the concept of prosody, its forms and its functions. They will be able to quantitatively characterize prosody, and to make a typological description (accents, tones, stress). They will learn how to explain the prosodic characteristics of utterances with a particular accentual or phrase pattern, or to establish links with syntax, discourse, emotions and attitudes. Students will also learn how to read papers on prosody, critically evaluate information and to report it in a clear manner.

2. Prerequisites

None

3. Learning outcomes

On successful completion of this course, students should be able to:

- Describe prosodic (typological) description of a language
- Conduct an acoustic analysis to describe prosodic phenomena and to solve tasks related to prosodic phonology questions: identifying accents, contours, relations between a contour and a syntactic structure or a discourse phenomenon
- Read experimental articles related to prosody and be able to analyze them

Language Acquisition

1. Course description

The course will begin with an introduction to first language (L1) acquisition, addressing key research questions, the logical and developmental problems of language acquisition, and current theoretical approaches. Building on this foundation, the course will delve further into L1 acquisition, with a specific focus on the development of functional structure in child grammar. Fundamental hypotheses related to this topic will be explored and critically analysed to provide insights into syntactic development in early language acquisition.

The course will then examine language acquisition in the context of bilingualism, exploring both the challenges and opportunities faced by children growing up with multiple languages and critically reviewing fundamental hypotheses on bilingual language acquisition.

Second language (L2) acquisition will also be addressed, focusing on the similarities and differences between first and second language acquisition. Particular emphasis will be placed on the initial state

in L2 acquisition and on key hypotheses related to it. The discussion will then shift to interlanguage, reflecting on the mechanisms that shape it.

The course will progressively focus on the development of the verbal domain across the three contexts mentioned. This comparative approach will provide a comprehensive understanding of syntactic development and its variations across different acquisition contexts. While the specific linguistic phenomenon addressed may vary, the course will maintain its structure, focusing on analysing the chosen topic and relevant data within each context.

2. Prerequisites

None

3. Learning outcomes

On successful completion of this course, students should be able to:

- **Analyze key issues in first language (L1) acquisition**, and evaluate the relevance of current theoretical approaches.
- **Critically assess fundamental hypotheses related to the functional structure in child grammar**, gaining insights into syntactic development during early language acquisition.
- **Understand the complexities of bilingual language acquisition,** identifying both challenges and opportunities for children growing up with multiple languages and evaluating key hypotheses on bilingualism.
- Compare and contrast first and second language (L2) acquisition, exploring similarities and differences, while examining the concept of interlanguage and reflecting on the mechanisms that shape its development.
- **Develop a comprehensive understanding of the verbal domain** by analyzing its acquisition across the contexts of L1 acquisition, bilingualism, and L2 acquisition, and critically evaluating data in light of relevant hypotheses.

BLOC: Dissertation

M1 Thesis preparation

1. Course description

In this methodological class, we will work on different elements that can facilitate the preparation and the writing of a M1 thesis on theoretical or experimental linguistics.

We will cover some of the following subjects:

- The research environment in France
- Doing a PhD program in linguistics
- Formulating research questions and hypotheses
- Citing documents and plagiarism
- The scientific writing
- Some tools such as Zotero or Overleaf will be also presented during class.

2. Prerequisites

None

Internship

Semester 3

BLOC: Fundamentals of linguistics 3

(5 out of 9 UEs)

Topics in Phonological Theories

1. Course description

This course is a graduate seminar which covers specific topics on phonological representations from the point of view of formal theoretical models, and of experimental approaches in laboratory phonology. Whenever possible, some of the course readings will be coordinated with Ling Lunch talks. Students will thus have the opportunity to read papers and attend talks by their authors.

2. Prerequisites

Phonology classes

3. Learning outcomes

On successful completion of this course, students should be able to:

- Learning about different theoretical models in phonological theory
- Improving students' knowledge of formal data analysis
- Improving students' understanding of the laboratory phonology approach
- Determining what types of phonological questions can be addressed through experimentation

Advanced Morphology

1. Course description

Linguistic morphology studies the internal structure of words and the way words relate to one another in form and meaning.

In the last 10 years, theoretical thinking on morphology has shifted away from an exclusive focus on formal analyses accounting for categorical properties of morphological systems, to attempts to model gradient aspects of these systems using quantitative tools. This shift was influenced by

taking into account important empirical results from corpus linguistics, psycholinguistics, and computational linguistics.

This class will acquaint students with contemporary literature on morphology taking a quantitative perspective, adopting a multidisciplinary perspective, and put students in the position of making contributions to that literature.

2. Prerequisites

General knowledge of morphology as an empirical domain is required, as provided e.g. by the S1 class "Morphology".

Given the multidisciplinary nature of the content, there is no other prerequisite, but acquaintance with any of the following area will be helpful: (i) formal approaches to morphology (see the S2 "Theoretical morphology" class); (ii) psycholinguistics and/or experimental linguistics; (iii) quantitative corpus linguistics; (iv) computational linguistics and/or machine learning.

3. Learning outcomes

On successful completion of this course, students should be able to:

- Read and criticize contemporary literature on morphology in theoretical linguistics, psycholinguistics, and computational linguistics.
- Contribute to original research in the domain of morphology.

Topics in Prosody

1. Course description

In this course, we will discuss main topics of prosody across languages. We will work on identifying and analyzing prosodic patterns and their functions in interaction with syntax, discourse, emotions, and attitudes using a mix of quantitative and qualitative methods and taking account of different theoretical approaches to the subject.

2. Prerequisites

The course on prosodic analysis (S2) is a prerequisite to this course

3. Learning outcomes

On successful completion of this course, students should be able to:

- Analyze prosodic (typological) description of a language
- Conduct an acoustic analysis of prosodic phenomena and solve tasks related to actual issues on prosodic phonology
- Read experimental articles related to prosody and be able to analyze them

Experimental Syntax

1. Course description

This class will show how large annotated corpora and experimental methods challenge the empirical basis of most syntactic theories. It will discuss the pros and cons of various corpus studies (spoken and written data) and experiments (rating, forced choice, reading times etc.), for various phenomena and languages. The syntax topics covered may change from one year to the other (constraints on word order, ellipsis, agreement, locality constraints, etc.)

2. Prerequisites

It is best to have taken a syntax class, a statistics class and/or an experimental design/corpus course.

3. Learning outcomes

On successful completion of this course, students should be able to:

- Read and understand a syntax paper using large language data and/or experiments
- Design a corpus study to test a syntactic hypothesis
- Design an experiment to test a syntactic hypothesis

Advanced syntax: theory and research

1. Course description

The aim of this class is to lead and supervise students into conducting their own research in theoretical syntax. Joint and collaborative work will be encouraged. The course, which will take the form of a shared seminar, will follow the basic steps of a research, from the definition of the domain and the hypothesis, the assessment of the existing literature, the operationalization into a research question and a research methodology, and into a full-fledged research. After a methodological premise conducted by the teacher, the course will be articulated through student presentations of the various steps: 1) literature review; 2) hypothesis and research questions; 3) methodology; 4) data and (preliminary) results; 5) discussion and conclusions.

2. Prerequisites

The course is conceived as a natural prosecution of Syntax and Topics in Minimalist Syntax, and it is mainly addressed to students specialising in syntax as an introduction to their Master thesis.

3. Learning outcomes

On successful completion of this course, students should be able to proceed in the second semester with the writing and completion of their Master thesis

Advanced Semantics and Pragmatics

1. Course description

The aim of this class is to lead and supervise students into conducting their own research in semantics and pragmatics. Joint and collaborative work will be encouraged.

2. Prerequisites

Basic knowledge of theoretical semantics is required, as provided e.g. by the S1 class "Semantics".

3. Learning outcomes

On successful completion of this course, students should be able to:

- Read and comment contemporary literature on semantics and pragmatics in theoretical linguistics and psycholinguistics.
- Contribute to original research in the domain of semantics and pragmatics.
- assess critically research proposals in semantics and pragmatics
- participate in collaborative research

Signal processing and computational methods for speech

1. Course description

This course aims to equip student with the basics of signal processing leading to Automatic Speech Recognition approaches and computational methods used in phonetics and phonology. We follow a laboratory-phonology approach looking at the role of fine-phonetic-detail in defining various types of contrasts (phonological, sociophonological, speaker-specific detail, etc.). We look at how to deal with data recording, automated transcriptions, semi-manual and automatic time-alignment and segmentation, exploring pre-processing and signal processing techniques for the various segmental and suprasegmental parts of the speech signal, before moving into how Automatic Speech Recognition approaches work. We then explore advanced computational techniques as implemented in state-of-the-art tools borrowed from classical signal processing tools as implemented in Praat going through to more advanced tools such as OpenSMILE for obtaining various feature sets, including ComParE16, eGeMAPS, emobase (both low-level descriptors and functionals). We end with a few sessions using the R programming language to run various signal processing techniques in addition to applying statistical analyses adapted to speech data

2. Prerequisites

There are no specific prerequisits for this course, but students will ideally need basic knowledge of Phonetics, a basic introduction to Phonology and to Experimental Phonology

3. Learning outcomes

On successful completion of this course, students should be able to:

- Gain insights into the role of fine-phonetic-detail and advanced signal processing tools in identifying various types of contrasts
- Gain essential technical skills from signal processing that form the basis of Automatic Speech Recognition
- Gain competency level in manipulating and analysing the speech signal and apply computational methods in phonetics and phonology
- Identify the various measures that can be applied to identify various categories following the relational invariance approach
- Use computational approaches borrowed from classical phonetic/phonology studies and from Automatic Speech Recognition as implemented in, e.g., Praat, OpenSMILE and R for signal processing and statistical analyses
- Being able to statistically analyse the outputs

History and epistemology of linguistic sciences

1. Course description

This interdisciplinary course brings together several subfields of Linguistics, The History of Linguistic Typology. The History of Field Work and Epistemology, the component that deals with knowing and the methods of obtaining knowledge in the history of Linguistics. The study of the great variety of typological structures has been, and still is, a great challenge for missionaries and linguists. The main objectives of this course are (1) to give an overview of the history of linguistics of Amerindian languages and the origins of comparative linguistics, and (2) to analyze a selection of representative texts (Francisco Ximénez, Hervás y Panduro, Heckewelder, Severin Vater, Duponceau, Pickering, Gallatin, Hale, Francisco Pimentel, Lucien Adam, Boas, Sapir). This course concentrates on early modern descriptions of non-Western languages and the impact of these studies on the history of Linguistic thought. The main focus is the study and documentation of American indigenous languages during the pre-modern period, most of them written in French (Micmaque; Algonquin) English (The Indian Grammar begun), Spanish (Carochi's grammar of Nahuatl) and Portuguese (Anchieta, Tupinambá). An overview will be given of the most important sources (missionary and non-missionary), the linguistic documentation, namely *grammars* ('Extended Latin Grammar'/ grammaire étendue) and a selection of the great pioneering lexicographical works will be analyzed (*dictionaries*).

2. Prerequisites

None

3. Learning outcomes

On successful completion of this course, students should be able to:

- Apply the theoretical foundation (The Greco-Latin framework and the concept of "Grammaire latine étendue) as explained during the CM sessions in the assignments, the presentation, and the final essay.
- Demonstrate familiarity with the methodology and tools for research in the field of the History of Language Sciences.
- Theoretically substantiate a chosen topic, using the relevant literature. Through the chosen case study, the student demonstrates the ability to apply this theoretical framework.
- Demonstrate scientific skills in the presentation and the final project, such as correct citation, paraphrasing, summarizing, analyzing, and referencing sources.

Topics in Chinese linguistics

1. Course description

The course is designed to provide an overview of the major syntactic and semantic features of the Chinese language (primarily Mandarin Chinese, with occasional references to other Sinitic languages). After an introduction to the Chinese languages, the course will explore a particular

topic based on published research. Examples of topics studied in previous years include: The Noun Phrase; Adjectives; Grammatical and Lexical Aspect...

Le cours est destiné à fournir une vue d'ensemble des principales caractéristiques syntaxiques et sémantiques de la langue chinoise (principalement le chinois standard, avec des références occasionnelles à d'autres langues sinitiques). Après une introduction aux langues chinoises, le cours explorera un sujet particulier basé sur des recherches publiées. Quelques exemples de sujets étudiés les années précédentes : Le syntagme nominal ; les adjectifs ; l'aspect grammatical et lexical...

2. Prerequisites

The course relies on the basic linguistic concepts acquired in the first year of the Master's program. Although knowledge of Mandarin Chinese is not absolutely necessary, it is recommended for a better access to the linguistic data and part of the references. The course will be taught in English or in French according to the needs of the students.

Le cours s'appuie sur les concepts linguistiques de base acquis en première année de master. Bien que la connaissance du chinois mandarin ne soit pas absolument nécessaire, elle est recommandée pour un meilleur accès aux données linguistiques et à une partie des références. La langue d'enseignement sera l'anglais ou le français en fonction des besoins des étudiant·e·s.

3. Learning outcomes

By the end of this course, students should be able to:

- Situate Mandarin Chinese both in reference to other Sinitic languages and typologically;
- Describe the salient properties and characteristics of a given phenomenon or domain in the syntax and semantics of Chinese;
- Discuss several competing explanations or formalizations of this phenomenon or domain.

À la fin de ce cours, les étudiant·e·s devraient être capables de :

- Situer le chinois standard par rapport aux autres langues sinitiques et d'un point de vue typologique ;
- Décrire les propriétés saillantes et les caractéristiques d'un phénomène ou d'un domaine donné dans la syntaxe et la sémantique du chinois ;
- Discuter de plusieurs explications ou formalisations concurrentes de ce phénomène ou domaine.

BLOC: Skills in linguistics 3

(1 out of 3 UEs)

Corpora / Field linguistics (1 out of 2)

Data and corpora

1. Course description

Corpus Linguistics studies language using systematically organized collections of spoken and written texts, known as corpora. This course provides foundational knowledge of corpus linguistics, focusing on oral and written corpora. Key topics include the definition and evolution of corpus linguistics, types of corpora (written and oral), and principles of corpus design such as sampling, balance, and ethical considerations. Students will explore analytical tools for quantitative and qualitative studies of linguistic patterns (using large-scale corpora in well-documented languages – English, in particular) and learn about applications in linguistic description / data collection, corpus constitution & annotation, in field situation and in the lab. The course highlights differences between oral and written corpora, as well as challenges in analyzing spoken data, and data maintenance.

2. Prerequisites

None

3. Learning outcomes

On successful completion of this course, students should be able to:

- Constitute oral and written corpora
- Annotate, analyze and maintain them
- Use existing large-scale corpora tools to conduct quantitative studies of specific phenomena

Field Linguistics: Describing and documenting endangered languages

1. Course description

This course introduces the principles and methods of linguistic fieldwork. It consists of two interwoven components: one which presents the theory and methods of documentation of (mainly endangered) languages, and another practical component, in which we will apply these concepts to the description of a language.

Working with a language consultant (a speaker of a language unknown to the students and instructor), we will collect language data in order to develop an analysis of the language's phonology, morphology and syntax.

2. Prerequisites

Sufficient familiarity with phonetics/phonology to transcribe and analyse data in an unknown language

3. Learning outcomes

On successful completion of this course, students should be able to have:

- An understanding about the goals, methods, issues and outcomes of the field of linguistics devoted to documenting and preserving languages.
- A practical methodology for eliciting and analyzing data from a speaker
- An awareness of issues surrounding language endangerment

- A general knowledge about linguistic diversity and its importance

Experimental Design (1 out of 1)

<u>Ethics and Experimental Design</u>

1. Course description

This course aims to equip students with the skills required to build a robust experimental design in psycholinguistics. We will first be looking at the steps required to build an experiment, to formulating a hypothesis and a research question, to determining factors impacting on an experiment (from internal to external factors). We will look then briefly at some examples of experiments in both production, perception and comprehension before thinking about the population to be tested, and the items to use in an experiment. We will consider some issues related to building and running an experiment. We will then build various types of experiments using PsychoPy and other platforms. Ethical considerations will be covered at various stages guiding students towards submitting their ethics application, if required, for their research design. Notions of statistics will be discussed with supporting documents provided.

2. Prerequisites

None

3. Learning outcomes

On successful completion of this course, students should be able to:

- Understanding of how to design a psycholinguistic experiment
- Understanding the impact of choices made in experimental designs on outputs
- Understanding role of reproducibility and transparency in research and having an ethical study
- Understanding of key issues related to building and running an experiment
- Application of psycholinguistic methods in designing various types of experiments using psychoPy.and other platforms
- Understanding the type of statistical techniques adapted to their data
- Understanding ethical considerations to apply to their own research activity

Statistics (1 out of 1)

<u>Advanced Statistics</u>

1. Course description

This course aims to support students towards making use of appropriate statistical methods adapted to their data. After revising basics of descriptive and inferential statistics, we will cover the family distributions encountered in linguistic research: numeric, binary categorical, count or likert-

scale response variables. We will explore fixed and random effects paying attention to when to use the latter. We continue with various datasets providing descriptions, explorations, and analysing them using the most appropriate tool to answer specific hypotheses, following a confirmatory data analysis approach. An extension to exploratory data analyses will explore data reduction techniques and machine learning suitable for various types of family distributions. Finally, we move to a corpus data analysis, where we look at exploring written corpora and manipulating them by identifying types and tokens and stop words, identifying compound words, n-grams, PoS-Tagging (Part of Speech-Tagging), document and feature co-occurrence matrix (FCM) and then applying various statistical analyses adapted to textual data: Simple and relative frequency analyses, lexical diversity, collocations, word clouds, network analysis, and finally poisson regression.

2. Prerequisites

Students will need basic knowledge of statistical approaches

3. Learning outcomes

On successful completion of this course, students should be able to:

- Identify the type of statistical design to employ based on a subset of datasets
- Explore their dataset and provide specific descriptive and inferential statistical analyses
- Understand the difference between confirmatory and exploratory data analyses approaches
- Have a critical eye on the approaches to use in statistical designs
- Explore written corpora and being able to quantify patterns in the data based on various techniques covered in class

BLOC: Broadening 3

(2 out of list below)

UE Transverse UPCité (UE Sport ou UE Engagement)

UE LIBRE (External, Circle U, Smarts UP etc.)

Broadening in Linguistics 1

Speech Perception

1. Course description

This course is a graduate seminar which explores, through research articles, how speech, produced by multiple articulatory actions, is perceived in the communication process. The reading material highlights the interface between speech production, perception, and cognition, with a focus on the complexity of speech motor systems and their language-specific coupling to auditory goals. Among the topics covered, we will review the main theories of speech perception, the models proposed for cross-language (L1-L2) speech perception, and the perception of speech by new-borns acquiring their native language.

2. Prerequisites

Phonetics and phonology

3. Learning outcomes

On successful completion of this course, students should be able to:

- Learning about different theoretical currents in speech perception
- Improving students' knowledge of the tools used to set up speech perception experiments
- Guiding students in developing research questions (that may be pursued in M2 theses)
- By the end of the course, students are expected to develop their own perspectives on the variability observed in speech production and perception in different languages, and to understand the relevance of these perspectives for experimental design and data analysis in specific languages they are interested in.

History of Linguistic Theories

1. Course description

This course aims to provide a general overview of the development of linguistic theories, mainly focusing on grammars and dictionaries and the formation of linguistic tools in the Western tradition, particularly since the Greco-Roman Antiquity. It draws on a selection of foundational texts from Antiquity, the Renaissance, the grammatisation of European vernacular languages, and, simultaneously, the documentation of non-European languages worldwide (16th-18th centuries) and the birth of comparative linguistics or comparative grammar (19th century). Secondly, this course also offers an initial insight into other descriptive traditions worldwide, such as the Arabic, Hebrew and Chinese grammatical traditions, and the 'circulation of linguistic knowledge' in Europe (in particular, the dissemination of knowledge about Asian languages during the 16th-19th centuries, such as Chinese, Vietnamese, and Japanese). In particular, it examines how the discovery of non-Western languages during the early modern period and the 19th century contributed to shaping linguistic theory development further.

2. Prerequisites

None

3. Learning outcomes

On successful completion of this course, students should be able to:

- Apply the theoretical foundation (The Greco-Latin framework and the concept of "Grammaire latine étendue) as explained during the CM sessions in the assignments, the presentation, and the final essay.
- Demonstrate familiarity with the methodology and tools for research in the field of the History of Language Sciences.
- Theoretically substantiate a chosen topic, using the relevant literature. Through the chosen case study, the student demonstrates the ability to apply this theoretical framework.
- Demonstrate scientific skills in the presentation and the final project, such as correct citation, paraphrasing, summarizing, analyzing, and referencing sources.

La linguistique à la croisée des disciplines

1. Course description

The course will analyze a variety of questions central to linguistics both from a diachronic and an epistemological perspective. The development of linguistic thinking will be examined in the light of its interactions with other phenomena (such as the evolution of writing systems and their different features, the birth and development of philological practices in Antiquity, the development of logic and philosophy), as well as other scientific disciplines (philology, mathematics, ethnology, sociology, poetics, natural sciences, cognitive sciences, computer sciences…).

Le cours analysera une variété de questionnements linguistiques dans une perspective à la fois diachronique et épistémologique. Le développement des idées linguistique sera examiné à la lumière de ses interactions avec d'autres phénomènes (tels que l'évolution des systèmes d'écriture et de leurs différentes caractéristiques, la naissance et le développement des pratiques philologiques dans l'Antiquité, le développement de la logique et de la philosophie), ainsi qu'avec d'autres disciplines scientifiques (philologie, mathématiques, ethnologie, sociologie, poétique, sciences naturelles, sciences cognitives, sciences de l'informatique...).

2. Prerequisites

None

3. Learning outcomes

On successful completion of this course, students should be able to:

- Place a number of relevant moments in the history of linguistic theories within their broader historical and epistemological contexts.
- Establish meaningful connections between the methodologies and the production of knowledge proper to linguistics and to other disciplines over time.

À la fin de ce cours, les étudiant·e·s devraient être capables de :

- Situer un certain nombre de moments importants de l'histoire des théories linguistiques dans leur contexte historique et épistémologique.
- Être en mesure d'établir des liens substantiels entre la linguistique et à d'autres disciplines dans leurs méthodologies et dans leur production des connaissances à travers le temps.

East Asian Linguistics

1. Course description

The course is designed to provide an overview of the major languages of East Asia, namely Chinese (Sinitic languages), Japanese, and Korean. These languages will be contrasted in terms of their phonological systems, graphic systems, and typological features at the morphological and syntactic levels. We will take a closer look at features that are shared despite their typological and phylogenetic differences (e.g., classifiers) or syntactic structures that show well-known differences (e.g., relative clauses, verbal morphology).

Le cours a pour objectif de présenter les principales langues d'Asie orientale, notamment le chinois (ou langues sinitiques), le japonais et le coréen. Ces langues seront comparées du point de vue de leurs systèmes phonologiques et graphiques, ainsi que de leurs caractéristiques typologiques aux niveaux morphologique et syntaxique. Nous examinerons de plus près les caractéristiques partagées malgré leurs différences typologiques et phylogénétiques (par exemple, les classificateurs) ou les structures syntaxiques qui présentent des différences notables (par exemple, les propositions relatives, la morphologie verbale).

2. Prerequisites

The course relies on the basic linguistic concepts acquired in the first year of the Master's program. Although knowledge of any of the three languages is not necessary, it is an advantage for a better access to the linguistic data and part of the references. The course will be taught in English or in French according to the needs of the students.

Le cours s'appuie sur les concepts linguistiques de base acquis en première année de master. Bien que la connaissance d'aucune des trois langues étudiées ne soit pas nécessaire, elle représente un avantage pour un meilleur accès aux données linguistiques et à une partie des références. La langue d'enseignement sera l'anglais ou le français en fonction des besoins des étudiant·e·s.

3. Learning outcomes

On successful completion of this course, students should be able to:

- Describe the general typological characteristics of Chinese, Japanese, and Korean;
- Describe the salient features of their phonological and graphic systems;
- Give broad descriptions of some of their shared linguistic features, as well as some of their more idiosyncratic linguistic phenomena.

À la fin de ce cours, les étudiant·e·s devraient être capables de :

- Décrire les caractéristiques typologiques générales du chinois, du japonais et du coréen ;
- Décrire les traits saillants de leurs systèmes phonologiques et graphiques ;
- Décrire de manière générale certaines de leurs caractéristiques linguistiques partagées, ainsi que certains de leurs phénomènes linguistiques plus idiosyncrasiques.

Meaning matters

1. Course description

The aim of the seminar is to make students familiar with contemporary research on topics in semantics and pragmatics, and the interfaces with other fields. This course offers an opportunity to further one's knowledge of the discipline, and to test and apply one's skills on real data. The specific content varies each year.

2. Prerequisites

Knowledge of theoretical semantics and pragmatics is required, as provided e.g. by the S2 class "semantic analysis"

3. Learning outcomes

On successful completion of this course, students should be able to:

- read and comment contemporary literature on semantics and pragmatics in theoretical linguistics and psycholinguistics.
- contribute to original research in the domain of semantics and pragmatics.
- assess critically research proposals

Sign language linguistics

1. Course description

This course is an introduction to sign language linguistics. It shall give an overview of how sign languages are similar to spoken language and how they are different, and highlight how studying languages in the visual modality can widen and inform our understanding of the human language faculty. Topics will include: sign language phonetics and phonology, morphology, syntax, semantics; sign and gesture; grammaticalisation and diachrony; neural representation and psycholinguistic aspects; acquisition and emergence of sign languages; bimodal bilingualism; sign language and Deaf education; sign language and Deaf rights.

2. Prerequisites

The course is conceived as an introduction to sign language linguistics, and has no prerequisites, except an open mind and a genuine interest.

3. Learning outcomes

On successful completion of this course, students should be able to:

- be able to read most literature on sign language linguistics
- be aware of the societal, ethical, educational, political issues at stake with sign languages
- have some knowledge of LSF and other related sign languages

Language and Gender

1. Course description

The class teaches grammatical gender systems in their typological, psychological and social aspects. More specifically. We will study the typology of grammatical gender systems in a wide variety of languages (how many genders, predictability of gender assignment to nouns, gender agreement) as well as the referential biases associated with grammatical genders.

We will also discuss the link between grammatical gender and social gender, recent evolutions of pronouns in European languages (new words or new morphological paradigm cells), closest conjunct agreement, particularly in the Romance languages. We will also deal with recent evolution in 21st century of Western languages with proposals for a less androcentrist communication.

2. Prerequisites

An introduction to morphology, syntax and/or language typology is not required but will be helpful.

3. Learning outcomes

On successful completion of this course, students should be able to:

- Identify the major gender systems in the world's language
- Discuss the predictability of grammatical gender
- Discuss the interpretability of grammatical gender
- Identify the major gender agreement types (in European languages)
- Identify the major innovations in gender neutral communication
- Discuss the relationship between social and grammatical gender

1 UE skills in linguistics 3 (1 from the list below; see above for description)

- **Data and corpora**
- **Field Linguistics: Describing and documenting endangered languages**
- **Ethics and Experimental Design**
- **Advanced Statistics**

<p align="center"><i>BLOC: Dissertation</i></p>

M2 Thesis preparation

1. Course description

In this methodological class, we will work on different elements that can facilitate the preparation and the writing of a M2 thesis on theoretical or experimental linguistics.

We will cover some of the following subjects:

- The research environment in France
- Doing a PhD program in linguistics
- Formulating research questions and hypotheses
- Citing documents and plagiarism
- The scientific writing
- Some tools such as Zotero or Overleaf will be also presented during class.
- Conducting an experiment and applying for ethical approval within the PGSL-Ethics Committee, if required.
- Collecting data and performing analyses

2. Prerequisites

None

Semester 4

<p align="center"><i>BLOC: Dissertation</i></p>

M2 Thesis