Research Opportunity Program (ROP) courses
in the Department of Language Studies

Summer/Fall/Winter 2024-2025

Please visit the ROP program page for more information on these and other positions, as well as how to apply.

Summary of project titles, supervisors, and home programs (further details below)

Program	Supervisor	Project title
FRE	Troberg	Jus, Sus, Ens, Plat et Mort: L'expression du résultat en ancien français
ITA	Lobalsamo	Digital and Virtual Experiential Learning (EL)
LIN	Atkinson	Development of children's sentence processing mechanisms
LIN	Atkinson	Do second language learners process sentences in the same way as native speakers?
LIN	Ozburn	Language Profiles Project
LIN	Ozburn	Phonetics and Phonology of ATR
LIN	Schertz	Sounds of UTM: Speech production and perception
LIN	Troberg	Up, Down, Away, Flat, and Clean: Results Across Languages
LIN	Zhuang	Learning indigenous language for globalized scholarship: Nepal Bhasa in Toronto

Along with the description on the ROPAPP, please ensure that you meet the prerequisites for the course:

All 299s	Minimum 4 credits, Maximum 9 credits.
EDS 399	EDS 100 and/or EDS 200, EDS 210, EDS 220, EDS 300, EDS 310, EDS 377, EDS 325 or EDS 388
FRE399	FRE227H5 or FRE240H5 or FRE272H5, FRE282H5, FRE283H5
ITA499	1.0 credit from ITA350H5 or ITA351H5 or ITA352H5 or ITA450H5.
LIN399	LIN101H5 and LIN102H5 and 1.0 credit from (JAL253H5, LIN228H5, LIN229H5, LIN231H5, LIN232H5, LIN237H5, LIN256H5, JLP285H5/LIN388H5)

PROJECT DESCRIPTIONS

Project title: Jus, Sus, Ens, Plat et Mort: L'expression du résultat en ancien français

Supervisor: Michelle Troberg
Course code(s):   FRE399H5
Term(s) offered: Fall 2024
Relevant programs: French, Linguistics

Description:

You may have already noticed that if a balloon floats upward, an English speaker might say "The balloon floated up and away", using small words called particles to express the direction and end point of the movement, while another language like French might express all of this in a verb: "Le ballon s'est envolé". Similarly, English speakers can say things like "I wiped the table clean", but French speakers prefer expressing the result in the verb: "J'ai nettoyé la table". It has been said that languages tend to pattern either like English or like French, but the history of French shows that there is actually much more to say about it than that! Old French had particles that expressed directionality, much like English: "aller jus/sus/hors/ens/arriere/avant" 'to go down/up/out/back/forth' and speakers said and wrote things like "essuyer le sang jus" 'to wipe the blood off' and "l'abattre jus plat" 'to beat it down flat' - yet we don't find evidence of strong resultative secondary predication like "floating up" or "walking one's shoes ragged." This project investigates some of the earliest Old French prose texts with the goal of quantifying and qualifying the different ways in which change of location and state are expressed. The findings will be used to evaluate the vitality of resultativity expressed in words other than the main verb and to establish possible correlations with the loss of these patterns. We will be collecting data from texts housed in large online databases.

Students are involved in all steps of the research project: formulating research questions, collecting data, visualizing and interpreting the findings, and presenting findings.

For this project, I am looking for students who have strength in any one of syntax, morphology or semantics and background in French. Knowledge of Old French is not required!

Project title: Digital and Virtual Experiential Learning (EL)

Supervisor: Teresa Lobalsamo
Course code(s):   ITA499H5
Term(s) offered: Winter 2025
Relevant programs: Computer Science, Cultural Studies, Diaspora Studies, Education
                              Studies, Italian Studies, Teaching and Learning

Description:

Part 1. Contribute to the creation of an original open-access eTextbook and its digital assets (12 modules/chapters).
- Transfer existing materials from hard copy to digital.

- Design and produce activities and virtual EL opportunities (e.g. 360-degree VR photographs and/or tours).

Part 2. Pilot and test the eTextbook within small, student-working groups. Create and administer a student-engagement survey to
- Gauge the impact of the interactive activities and VR experiences on student learning.
- Gather student feedback on the eTextbook and its various components regarding its usability as a digital resource.
- Troubleshoot issues, modify and/or recommend future modifications to content.

Additional Information
- Remote training on digital software will be provided as required.
- Travel to local sites in the Greater Toronto Area is required. Group travel arrangements will be made (via a ride share app). If necessary, students may arrange their own transportation.

Project title: Development of children's sentence processing mechanisms

Supervisor: Emily Atkinson
Course code(s):   LIN299H5 (summer only), LIN299Y5, LIN399Y5
Term(s) offered: Summer 2024; Fall/Winter 2024-2025
Relevant programs: Linguistics

Description:

The goal of this project is to examine the development of the mechanisms that allow children to understand and produce sentences in real time and how these mechanisms interact with their grammatical knowledge. In order to be able to communicate effectively, language users need to be able to understand sentences quickly and efficiently. To this end, our sentence processing mechanisms are incremental: we attempt to interpret words and build the internal structure of the sentence as it unfolds rather than waiting until the sentence is complete. This incremental strategy is risky, however, because the initial interpretation may not be correct for the ultimate, intended meaning of the sentence. If this occurs, the comprehender must reanalyze the input or revise their incremental interpretation, which is costly because it requires additional cognitive resources. Thus, a foundational question in (developmental) language processing is whether or not incrementality is innate or whether it needs to be learned. This research examines this foundational question by examining whether or not children process sentences in the same way as adults to uncover differences between the adult and child sentence processing mechanisms, and seeks to discover the locus of these differences when they are found.

We will use a combination of on-line and off-line behavioral tasks in this study. The online task we will use is eye-tracking, in which we track children's eye-movements (fixations and saccades) using a high-speed camera. The behavioral aspect of these tasks may involve (1) verbally answering a question posed by an experimenter or by the experiment computer, (2) listening to pre-recorded utterances, and (3) searching for an object or scene presented on the experiment computer screen. During the course of performing these behaviors, we may record participants' eye-movements, verbal responses, and behavioral responses (i.e., a mouse-click or a button-press). The off-line tasks include several designs and they are all presented as games to be played with an experimenter. Examples of these tasks include selecting a picture

that matches the interpretation of a sentence, completing pictures by asking and answering questions, evaluating whether or not a sentence is true of a story that they've been told, or colouring in a picture based on verbal instructions.

Project title: Do second language learners process sentences in the same way as native speakers?

Supervisor: Emily Atkinson
Course code(s):   LIN399Y5
Term(s) offered: Fall/Winter 2024-2025
Relevant programs: Linguistics

Description:

The goal of this project is to examine how second language (L2) learners comprehend and produce sentences in real time and how these mechanisms compare to those of native speakers, especially in cases where one language has a structure that is not found in the other. In order to be able to communicate effectively, language users need to be able to understand sentences quickly and efficiently. To this end, our sentence processing mechanisms are incremental: we attempt to interpret words and build the internal structure of the sentence as it unfolds rather than waiting until the sentence is complete. This incremental strategy is risky, however, because the initial interpretation may not be correct for the ultimate, intended meaning of the sentence. If this occurs, the comprehender must reanalyze the input or revise their incremental interpretation, which is costly because it requires additional cognitive resources. Thus, a foundational question in L2 language processing is whether or not an incremental strategy is used, despite the fact that it could lead to errors, especially in the face of potentially being less proficient in the language. This research examines this foundational question by examining whether or not adult L2 learners process sentences in the same way as native speakers to uncover differences between the native and L2 sentence processing mechanisms, and seeks to discover the ways in which the sentence processing system may adapt, change, or develop in the face of language data from a new language (i.e., a second language).

We will use a combination of on-line and off-line behavioral tasks in this study. The online tasks we will use are either eye-tracking, in which we track eye-movements (fixations and saccades) using a high-speed camera, or self-paced reading, in which participants read sentences one word at a time. The behavioral aspect of these tasks may involve (1) reading sentences presented on a computer screen, (2) verbally answering a question posed by an experimenter or by the experiment computer, (3) listening to pre-recorded utterances, and (4) searching for an object or scene presented on the experiment computer screen. During the course of performing these behaviors, we may record participants' eye-movements, verbal responses, and behavioral responses (i.e., a mouse-click or a button-press). The off-line tasks include several designs and they are all presented as games to be played with an experimenter. Examples of these tasks include selecting a picture that matches the interpretation of a sentence, completing pictures by asking and answering questions, evaluating whether or not a sentence is true of a story that they've been told, or colouring in a picture based on verbal instructions. These are often based on experiments designed with child participants in mind. This is so that two groups of learners can be compared: children learning their first language and adults learning their second.

Project title: Language Profiles Project

Supervisor: Avery Ozburn
Course code(s):   LIN299Y5, LIN399Y5
Term(s) offered: Summer 2024; Fall/Winter 2024-2025
Relevant programs: Linguistics, LTL

Description:

In this project, our research aims for better cultural contextualization of under-represented languages discussed in linguistics courses at the University of Toronto. We will be researching several languages with the goals of (1) creating linguistic datasets for several 100- and 200-level LIN courses on the targeted under-represented languages, (2) collecting information about the culture, geography, etc. of these languages, and (3) working with language users and community members to create recordings and collect additional information. The goal is to build "language profiles" of several languages - a set of materials with linguistic datasets paired with contextualizing information to make the language come alive for students. Students will help to collect linguistic and cultural information, put together datasets, and possibly have first-hand meetings with language users to make recordings and confirm information.

Project title: Phonetics and Phonology of ATR

Supervisor: Avery Ozburn
Course code(s):   LIN299Y5, LIN399Y5
Term(s) offered: Summer 2024; Fall/Winter 2024-2025
Relevant programs: Linguistics

Description:

In this lab group, our research aims for a better understanding of phonetic, phonological, and morphophonological patterns related to the property known as 'Advanced Tongue Root', or ATR, in vowels in African languages. In this project, we will examine the relationship between the phonetic and (morpho)phonological behaviour of ATR through a combination of literature review, acoustic studies, ultrasound studies, examination of novel phonological data, and experiments. Students will help to annotate and analyze recordings (both audio and ultrasound), conduct literature review, and design and develop experiments.

Project title: Sounds of UTM: Speech production and perception

Supervisor: Jessamyn Schertz
Course code(s):   LIN299H5, LIN399H5
Term(s) offered: Summer 2024; Fall 2024; Winter 2025
Relevant programs: Linguistics, Psychology

Description:

In the Sounds of UTM lab, our research aims for a better understanding of how we produce and understand speech. A common thread in the various research projects is incorporating the linguistic diversity of the GTA community. Students will help to develop, implement, and analyze data from speech production and perception experiments. Current projects include:
- Exploring the social, cognitive, and linguistic factors that constrain and facilitate phonetic imitation (e.g. the ability to accurately imitate different accents, voices, and speech sounds)
- Experiments probing the effect of language background on sensitivity to different linguistic features
- Comparing in-person and online data collection methodologies

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Project title: Up, Down, Away, Flat, and Clean: Results Across Languages

Supervisor: Michelle Troberg
Course code(s):   LIN399H5
Term(s) offered: Fall 2024
Relevant programs: Linguistics

Description:

Have you ever noticed that if a balloon floats upward, an English speaker might say "The balloon floated up and away", using small words called particles to express the direction and end point of the movement, while another language might express all of this in a verb. French is like that: "Le ballon s'est envolé". Similarly, English speakers can say things like "I wiped the table clean", and Japanese speakers can say something very similar, but again, French speakers prefer expressing the result in the verb: "J'ai nettoyé la table". It has been said that languages tend to pattern either like English or like French, but there is actually much more to say about it! Think about other languages you may know: an Austronesian or Slavic language? Arabic, Italian, or Chinese? Yoruba or Hindi-Urdu? Others? This project looks deeper at the degrees of variation among languages across time and space (the possibilities and the constraints) and considers the implications for formal approaches to language description, typology, and change. Data collection will consist of thorough literature reviews supplemented by small-scale field work.

Students are involved in all steps of the research project: formulating research questions, collecting data, visualizing and interpreting the findings, and presenting findings.

For this project, I am looking for students who have strength in syntax, morphology and/or semantics (e.g., doing well in at least one of the following courses: LIN232H5, LIN237H5, LIN231H5, LIN240H5) and who are looking for experience working in a range of different languages. Monolinguals and multilinguals are all welcome to apply!

Project title: Learning indigenous language for globalized scholarship: Nepal Bhasa in Toronto

Supervisor: Lingzi Zhuang
Course code(s):   LIN399Y5

Term(s) offered: Summer 2024
Relevant programs: Linguistics, LTL, EDS

Description:

This course provides a uniquely interdisciplinary, first-hand, and community-engaged opportunity for students with interests in linguistics, language teaching & learning, Sino-Tibetan (Trans-Himalayan) languages, and South Asian cultural/regional studies to experience, study, and collaboratively contribute to the scholarship and teaching practices of Nepal Bhasa (Newar), an indigenous language of Nepal that is at once undergoing sociopolitical transition at home, and re-situating itself as a language with emerging global connections.

Taking advantage of, and in collaboration with, the second iteration of the Toronto Newar Summer School, a two-week, indigenous scholar-led language course hosted at the University of Toronto's Department of the Study of Religion and Centre for Buddhist Studies in Summer 2024, students will participate in a immersive field research project, with the objectives of:

- Learning Nepal Bhasa (Newar), with a view towards documenting and studying its main linguistic features, from a combination of theoretical, typological and pedagogical perspectives;
- With the Summer School as a case study, documenting and understanding the context, goals, current practices, and complex positionalities of indigenous language pedagogy in a globalized, scholarship-oriented setting;
- Collaboratively contributing & presenting research output in these two areas.