

FALL 2025 INDEPENDENT STUDY & DIRECTED RESEARCH OPPORTUNITIES

Department of Linguistics, University of Arizona

HOW TO REGISTER:

To register for either an independent study or directed research, you must first contact the professor you are interested in working with. Our faculty are great; don't hesitate to email them!

1. In your email, ask the professor if they have any openings. You can certainly email more than one professor but send a separate email for each.
2. Once you've worked things out with a professor, decide together how many credits you want to take, which course and section number to use, and what the expectations are for your planned research.
3. Complete the [Independent Study Proposal Form](#) and have the professor e-sign it.
4. **Email the completed and signed form to our Program Coordinator**, Josh Carlin (jcarlin117@arizona.edu), and ask him to register you for the independent study.

DR. TOM BEVER (tgb@arizona.edu)

Students with at least four linguistics courses in their background, can work with me on a reading+essay type course, on the following topics (I am also open to other area suggestions): consciousness of language Language Processing (i.e., comprehension, production or acquisition); neurology of language; evolution of language".

DR. ANDREW CARNIE (carnie@arizona.edu)

Any project of student's choice, including reading+essay classes:

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| 1. | Syntax, semantics, and/or morphology in any language |
| 2. | Any aspect of Celtic languages |

DR. SANDIWAY FONG (sandiway@arizona.edu)

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| 1. | Syntactic Parsing. Could contribute programming, lexical entries, examples for languages and underlying theory for the SMT parser, a universal parsing system developed using the latest Minimalist Program concepts. |
| 2. | Artificial Intelligence (AI). Join projects on human language and AI, chain-of-thought reasoning and AI, and AI fine-tuning and prompting. |

DR. AMY FOUNTAIN (avf@arizona.edu)

All independent study and directed research will be online. Projects include:

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| 1. | Amy is always happy to work with students wishing to learn about and contribute to development of a web application for the Coeur d'Alene Tribe's Language Programs. You will need at least a little bit of experience with some (any) kind of coding (enough to know that you enjoy it). |
| 2. | Technology development for endangered or indigenous language communities-especially looking for students with software development (CS, ECE, Data) interests/experience to collaborate in software development projects. |
| 3. | Language reclamation, revitalization, repatriation, especially to support students' investigation of their own linguistic heritage. |
| 4. | Improving the teaching of linguistics to undergraduates, creating and implementing teaching tools, and studying the effectiveness of various kinds of instruction for students at different levels. |

DR. GUS HAHN-POWELL (hahnpowell@arizona.edu)

Qualifications: Python proficiency and successful completion of LING 439 preferred. Topics and projects include:

1. ANY PROJECT related to computational linguistics or natural language processing (with preference for non-English languages).
2. Machine reading for scientific discovery (ex. measuring the uncertainty of claims, identifying causal hypotheses, classifying citations, etc.)
3. Developing web-based tools for language documentation and linguistic annotation
4. Implementing and comparing the predictive power of computational models of some linguistic theory

DR. HEIDI HARLEY (hharley@arizona.edu)

Projects include:

1. Work on any topic in Hiaki (Yaqui), a language spoken in Arizona and Northern Mexico. Especially happy to work with any students who are members of the Pascua Yaqui tribe and are interested in learning more about their heritage language.
2. Study of the morphology, syntax or semantics of any language

DR. ROBERT HENDERSON (rhenderson@arizona.edu)

Topics and projects include:

1. Any topic in formal semantics, pragmatics, or philosophical logic.
2. Any topic concerning the documentation and description of Mesoamerican languages.
3. Plurality and Pluractionality Project. Students will annotate and/or analyze data on plurality /pluractional systems for some Mesoamerican language.
4. Gesture and Sign in Mesoamerica Project. Students will annotate and/or analyze data from Highland Mayan Sign Language or from the gesture systems of spoken highland Mayan languages.

DR. ERIC JACKSON (ejackson1@arizona.edu)

Topics and projects include:

1. Topic based on languages of East and Southeast Asia (at least Sino-Tibetan, Kra-Dai, and Hmong-Mien; if you have another language suggestion, I'm open to you making your case to me!)
2. Any topic related to O'odham
3. Any topic in natural language processing, but especially NLP for data-scarce languages (as long as you already have some background in programming and NLP; if you want to gain such a background, I can point you to some self-study resources and/or courses to take first)

Jeremy Johns

Topics include:

1. Phonology and semantics of reduplicative morphology.
2. Topics on Native American language planning and policy as well as language documentation and pedagogical development for revitalization/maintenance.
3. Topics related to O'odham (Uto-Aztecan) language teaching, learning or description.

DR. MOHSEN MAHDAVI MAZDEH (mahdavi@arizona.edu)

Topics and projects include:

1. Any topic on the syntax or phonology of the languages of the Middle East (especially Persian, Arabic, Turkish, and Kurdish).
2. Anything related to stress or intonation (It could be experimental phonetic projects or theoretical phonological topics).
3. The linguistic aspects of poetry and music (e.g., rhyme, meter, and text-setting).
4. The historical linguistics of Persian or Arabic.

DR. JANET NICOL (nicol@arizona.edu)

Projects include:

1. Second Language Learning. We are interested in the kinds of things that make it easier to learn new vocabulary. We teach people novel words under various learning conditions and then test them. Some of our studies may be conducted via Zoom; others will be conducted in person in my laboratory.
2. Bilingual Language Processing. We are also interested in how people produce and comprehend their second language (L2). In some of this research, we use an eye-tracking device to track eye-movements as participants read text, or look at an array of pictures while listening to spoken language, or to monitor pupil dilation, which occurs when participants encounter difficulty during listening tasks.

DR. DIANE OHALA (ohalad@arizona.edu)

Projects include:

1. Any topic on language development (particularly phonological development) in monolingual and/or bilingual children and adults.
2. Categorizing and organizing previously collected data on phonological development in monolingual English-speaking children and/or in Welsh-English bilingual children.
3. Evaluating and improving teaching in undergraduate introductory or psycholinguistics courses. Preceptorships (undergraduate teaching assistantships for credit) for LING 201 (Intro), LING 341 (Language Development), and LING 432 (Psychology of Language) are also possible for students who have taken these courses with Diane before.

DR. MASSIMO PIATTELLI-PALMARINI (massimo@arizona.edu)

Topics and projects include:

1. Biological foundations of language, in particular language pathologies (e.g., aphasia, dyslexia, Williams Syndrome, the case of "savants"), the genetics of language (in particular the gene FOXP2), neural correlates of language.
2. Language evolution (especially non-adaptationist/non-functionalist approaches), aspects of syntax that cannot be explained by the use of language in communication, Minimalism and optimal solutions in biology.
3. Deep formal invariants of language. Fibonacci numbers in syllables, prosody, and syntax. The syntactic tree as the optimal solution to the problem of minimizing dependencies while allowing expansion. Scaling laws in evolution or brain structure and organization, with interesting consequences for language.
4. Attitudes De Se (the syntax and semantics of referring to oneself, an inter-language comparative analysis).
5. Theories of reference: Is the semantics of natural languages purely "intentional"? (Entirely internal) (work by Noam Chomsky, Paul Pietroski, James McGilvray) Or do linguistic expressions refer to external mind-independent objective entities? (Work by Jerry Fodor and Zenon Pylyshyn).

DR. NATASHA WARNER (nwarner@arizona.edu)

Qualifications: LING 314 preferred but not required. Topics include:

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| 1. | Work on speech production and perception (phonetics lab). How we understand the speech we hear, even though casual speech often lacks the sounds of the words we think we're hearing. Students make acoustic measurements of natural and careful speech or help with perception experiments to look at how listeners process reduced speech. |
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DR. OFELIA ZEPEDA (ofelia@arizona.edu)

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| 1. | Work on the Tohono O'odham language spoken in Arizona and northern Sonora, Mexico. I am interested in working on projects with students in any area of O'odham linguistics, language, literature and culture. My primary focus is on applied aspects of language research. My other area of study is in language revitalization and documentation, and I would be interested in working with students wanting to learn more about revitalization through the American Indian Language Development Institute (http://aildi.arizona.edu/), and to work on projects within AILDI as well. I welcome the opportunity to work with students to develop research projects in any of the mentioned areas |
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