Department of Linguistics Independent Study/Directed Research Options for Undergraduates Spring 2016

University of Arizona

Professor: Thomas Bever
Email: tgb@u.arizona.edu
Projects and interests:
A variety of opportunities for independent study, work-study, and research assistantships. The research involves experimental studies of language comprehension, vision and spatial reasoning. Specific ongoing projects include:

1) Studies of reading and language understanding in Chinese, Arabic and others.
2) Studies of learning different kinds of artificial languages.
3) Studies of neurological functioning during normal language behavior (using EEGS).
4) Study of the perception of depth in visual arrays.
Students work closely with Dr. Bever and graduate students and are encouraged to develop their own project within the framework of one of the labs; this often leads to an honors thesis, and sometimes to a research conference presentation or publication.

Professor: Andrew Carnie
Email: carnie@u.arizona.edu
Projects and interests:
1) SCOTTISH GAELIC DESCRIPTIVE SYNTAX PROJECT. Students will work on entering original field data into a database and/or assist in the editing of sound files.
2) SCOTTISH GAELIC PHONOLOGY AND PHONETICS PROJECT. Students will work on data processing on a number of experiments analyzing aspects of the phonology of Scottish Gaelic.
3) ANY PROJECT (of student's choice) on syntax, morphology, or semantics.

Professor: Amy Fountain
Email: avf@u.arizona.edu
Projects and interests:
1) Various projects on the documentation and teaching of endangered languages. Recent projects include the development of web-delivered courses on language documentation, maintenance and revitalization for endangered language communities.
2) Various projects relating to the pedagogical uses of technology for the teaching of languages and linguistics.
3) Any topic (of the student's choice) in the area of prosodic phonology, language documentation, morphophonology, or the study of endangered languages.

Professor: LouAnn Gerken
Email: gerken@u.arizona.edu
Projects and interests:
In the Tweety Lab, we use preference tasks with 6- to 18-month-olds to ask what knowledge of their native language infants and children have, and what they can learn about a new language in a very short time. We also use production tasks to study the linguistic and psychological factors at work when 2- to 4-year-olds produce words and sentences.

Professor: Sandiway Fong
Email: sandiway@u.arizona.edu
Projects and interests:
1) Work on verifying the operation and corpora for an existing Government and Binding (GB) parser.
2) Computation and Minimalist parsing. Implementation of additional phenomena in the probe-goal model. A prototype computer implementation is available.
3) Semantic inference and processing with WordNet. New projects possible.
4) Arabic language treebank construction. Funding available.
5) Annotator and web programming opportunities. Funding available.

Professor: Mike Hammond
Email: hammond@u.arizona.edu
Projects and interests:
1) Activities in the SPAM Lab. Students can work in the lab designing and running experiments, doing statistical and/or acoustic analysis, etc. Projects concern phonological processing and speech perception. No specific background required.
2) Phonology. Students can work on various phonological topics, especially those dealing with English, or syllables, or stress, or OT. Students should have had appropriate coursework for the project.
3) Computational linguistics. Students should have had appropriate coursework for the project.
4) Welsh and Scottish Gaelic. Students can work on projects to do with the phonology of these Celtic languages.
5) Poetic meter and language games. Projects to do with the phonological implications of poetry and language games.

Professor: Heidi Harley
Email: hharley@u.arizona.edu
Projects and interests:
Work on 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).

Professor: Simin Karimi
Email: karimi@u.arizona.edu
Projects and interests:
Any topic in syntax, especially:

1) Focus and topic constructions and their realizations in different languages.
2) Complex predicate constructions: combination of a verb and another element to represent a simple verbal concept in various languages.
3) Verb-second phenomenon in Germanic languages.
4) Arbitrary control; obligatory and non-obligatory control
Qualifications: 201, and ideally 300 or 310.

Professor: Robert Henderson
Email: rhenderson@email.arizona.edu
Projects and interests:
(1) Any topic in formal semantics, pragmatics, or philosophical logic.
(2) Any topic concerning the documentation and description of Mesoamerican languages.
(3) PLURACTIONALITY AND ARGUMENTATION STRUCTURE PROJECT. Students will either help (i) conduct experiments on the interpretation of collective, distributive, and pluractional expressions in English, or (ii) build a database of pluractional effects on argument structure based on previous typological and descriptive literature.
(4) USPANTEKO PHONOLOGY AND PHONETICS PROJECT. Students will work on processing and analyzing data from narratives and experiments to answer questions about various prosodic phenomena of the Mayan language Uspanteko.

Professor: Janet Nicol
Email: nicol@u.arizona.edu
Projects and interests:
1) Research on how people produce and understand language, focusing on second language learners and bilinguals.
2) Research on word learning by second language learners (both the mechanisms of and variables that optimize word learning).
How we do our research: There are basically three types of methods.
(a) We have subjects read sentences and use a device that tracks their eye-movements, or records their brainwaves, while they are reading.
(b) We have subjects create sentences (which are tape-recorded and analyzed), or have them read or listen to sentences and respond by pressing a computer key or making a judgment.
(c) We teach people new words (pairing a new label with a picture) and then test them by having them label the picture.

Professor: Diane Ohala
Email: ohalad@u.arizona.edu
Projects and interests:
1) Work on the Language Acquisition Archival Project. Transcribing and digitizing data collected over a period of 10 years on phonological acquisition in preschool-aged children with typically or atypically developing language. Although the studies were phonological in nature, one of the aims of the current project is to maximize the data so that other aspects of language development may be studied. Familiarity with phonetic transcription is a plus but not required.

2) Any project having to do with first, second, or atypical language development in children or adults, particularly phonological acquisition.

Professor: Tyler Peterson
Email: tylerpeterson@email.arizona.edu
Projects and interests:
(1) Any area in formal semantics and/or pragmatics - this includes the (morpho)syntax interface - and at any level.
(2) Modality and evidentiality, both empirically and theoretically (syntax/semantics)
(3) Questions, both empirically and theoretically (syntax/semantics/pragmatics)
(4) Causatives, both empirically and theoretically (syntax/semantics)
(5) Fieldwork and language documentation, i.e. sketches of any area of a language (phonology, morphology, syntax, semantics). No specific region/language family.

Professor: Massimo Piattelli-Palmarini
Email: massimo@u.arizona.edu
Projects and interests:
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.

Professor: Natasha Warner
Email: nwarner@u.arizona.edu
Projects and interests:
1) Revitalization of a Native American language that has no living speakers to develop teaching materials (written or audiovisual) for use by the Mutsun community in re-acquiring their ancestral language. Students can be involved in writing the textbook, dubbing movies, etc.
Qualifications: LING 201 or LING 210.
2) Work on speech production and perception (phonetics lab work). How do we understand the speech we hear, even though casual speech often has none of 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.
Qualifications: LING 314. Students who speak Spanish fluently would be especially helpful, but Spanish is not required.

Professor: Adam Ussishkin
Email: ussishki@u.arizona.edu
Projects and interests:
Experiment design, item selection, and running experiments.
Qualifications: Passing grade in LING 314 or LING 315.

Professor: Andy Wedel
Email: wedel@email.arizona.edu
Projects and interests:
Work on the evolution of language sound systems over time, primarily using phonetic data from experiments and language corpora. Previous independent studies have involved learning to use various software packages to annotate and analyze experimental phonetic data.
Qualifications: No prior qualifications are required beyond responsibility and interest.

Professor: Ofelia Zepeda
Email: ofelia@u.arizona.edu
Projects and interests:
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/). I am open to having students work on projects within AILDI as well. I welcome the opportunity to work with students in developing research projects in any of the mentioned areas.

Professor: Malcah Yaeger-Dror
Email: malcah@gmail.com
Projects and interests:
1) Work on data collection, transcription, and alignment of conversational English and Spanish with transcriptions. Receive training in CA/Talkbank/ and FAVE automated alignment. Hourly pay or independent study credits available. Web skills an asset.

2) Learn about data collection and archiving techniques. Independent study credits available. Web skills an asset.

Frequently asked questions

What is the difference between independent study and directed research?
Independent study can be at all levels (1-499), while directed research is only upper division (3-492a). Independent study is for a Pass/Fail grade, while directed research is for a regular letter grade. They are otherwise basically the same.

How do I register for either one of those?
You should first email the professor you would like to work with. You should then take a copy of "independent study proposal form" to them and have them sign it. This form is emailed to the underling listserv before every semester. (You can also find it online). You should finally take this form to Shayna Walker in Comm 103B.