

Cognitive Science of Language

Chair, Psychological and Brain Sciences

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Graduate certificate: cognitive science of language

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The scientific study of language is larger than any one field, due in part to the broad diversity in forms and uses of language. The Cognitive Science of Language Program uses an interdisciplinary approach to the study of language, helping to prepare language scientists who are conversant in multiple domains.

Learning Outcomes

- **Broad Interdisciplinary Knowledge:** Demonstrate knowledge of key concepts, theories, and methods in the core disciplines of the cognitive science of language. This includes understanding fundamental principles of at least three of the five major language-science fields – for example, linguistics, psychology (psycholinguistics), neuroscience of language, communication sciences & disorders, learning sciences, and computational approaches to language.
- **Integrative Analytical Skills:** Critically evaluate and synthesize research from multiple language-science disciplines to inform complex questions about language. Students will be able to read and assess scholarly literature across different fields and integrate diverse theoretical perspectives. They should connect insights from various disciplines in their writing and problem-solving; for instance, relating psycholinguistic experimental findings to linguistic theory, or linking neuroscience evidence to computational models of language.
- **Interdisciplinary Research Ability:** Apply approaches from more than one discipline to design and conduct original research on language. Students will carry out research or scholarly projects that draw on interdisciplinary methods. For example, a certificate student might incorporate both behavioral experiments and computational modeling in a study, or use theoretical frameworks from linguistics and psychology in formulating research questions. By completion of the program, students will have produced substantial research (e.g., comprehensive exam papers or dissertation work) that demonstrates an interdisciplinary approach to the scientific study of language.
- **Communication and Collaboration:** Effectively communicate research ideas and findings to both specialized and interdisciplinary audiences and collaborate across disciplines. Certificate students will develop the skill to explain concepts from their primary field to those outside it, and to understand and use terminology from other disciplines. They will practice presenting their research to scholars from varied backgrounds during the Language Discussion Group meetings. These meetings

will be held weekly and students will have ample time to practice presenting their research. They will also learn to work in interdisciplinary teams; for example, collaborating with faculty or peers from different departments on projects or discussion groups.

- **Engagement in Interdisciplinary Scholarship:** Engage with the broader interdisciplinary language science community and disseminate interdisciplinary research. Students will actively participate in scholarly activities that bridge disciplines, such as attending or presenting at interdisciplinary colloquia, workshops, or conferences (e.g., Language Discussion Group, DeLTA meetings, etc.). They will demonstrate professional development by sharing their work beyond their home department and by networking with researchers in other fields. By the end of the program, students should have experience disseminating their interdisciplinary insights (through presentations, posters, or publications) and understand how their cross-disciplinary training positions them for diverse career opportunities.