

**White Paper:**  
**Proposal for Graduate-Level Interdisciplinary Degree Programs**

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**Abstract**

The Department of Linguistics submits this white paper with suggestions on how to overcome what we view to be the greatest challenges to working across disciplinary boundaries at the University of Colorado Boulder in the areas of teaching, curriculum, and research. As a department that forefronts interdisciplinary relationships with the disciplines of Anthropology, Cognitive Science, Communication, Computer Science, Education, Psychology, Spanish and Portuguese, and Speech, Language, and Hearing Science, we are in a unique position to comment on the administrative obstacles that make interdisciplinary relationships difficult at CU Boulder and to propose ways to enhance these relationships. In this document, we propose that the institutionalization of graduate-level interdisciplinary degree programs is essential to CU Boulder's survival in an increasingly competitive academic market. We sketch out preliminary ideas for establishing an interdisciplinary Master's and PhD degree option throughout the University. We believe that this curricular shift would give CU Boulder a significant market advantage over other private and public university competitors. In addition, it would encourage our students and faculty to forge and deepen the interdisciplinary relationships that are now viewed by research funding institutions as critical to academic discovery.

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In this document, we propose that the institutionalization of graduate-level interdisciplinary degree programs is essential to CU Boulder's survival in an increasingly competitive academic market. We sketch out preliminary ideas for establishing an interdisciplinary Master's and PhD degree option throughout the University. We believe that this curricular shift would give CU Boulder a significant market advantage over other private and public university competitors. In addition, it would encourage our students and faculty to forge and deepen the interdisciplinary relationships that are now viewed by research funding institutions as critical to academic discovery.

Obstacles to Interdisciplinary Relations in Teaching

The linguistics department is heavily invested in the development of interdisciplinary relationships with allied disciplines, yet our faculty members have found it increasingly difficult to incorporate these relationships into our teaching mission. One of the most prominent obstacles faced by our faculty is the lack of administrative incentive for interdepartmental teaching at both the undergraduate and graduate levels. Significant planning is involved before our faculty members can design a course with a faculty member in another discipline, yet there are no stipends available to support this planning. In addition, even though co-taught courses often require twice the work of a traditional course, given the necessary negotiations that must take place between two disciplines, many departments still provide faculty with only half-credit for teaching these courses, making such pedagogical collaborations impossible for faculty members who wish to remain productive in their research. For these collaborations to be successful,

faculty will need permanent and sustainable incentives for planning interdisciplinary courses that provide time as well as money. Protecting faculty research and development time is of course essential, as any *interdisciplinary* work is grounded in disciplinary expertise.

A second obstacle faced by our faculty lies in the area of curricular development. Newer generations of graduate students keen to enhance their marketability in both academia and industry have begun to pressure the faculty to allow them to pursue a dual degree between linguistics and one of our allied disciplines. For example, in the past few years at least a dozen MA and PhD students in our sociocultural linguistics program have asked if they could pursue a dual degree between Linguistics and disciplines that include Anthropology, Education, Spanish and Portuguese, and Speech, Language, and Hearing Science. These students are inspired by the unique dual degree possibilities enabled by our relationship with the Institute of Cognitive Science, which shepherds a Cognitive Science Combined PhD and a Cognitive Neuroscience Combined PhD. This program has facilitated outstanding dissertations in areas such as computational linguistics and personalized computing, with the students demonstrating unique combinations of skills. Their cutting edge research results have been essential to successful performance on several projects funded by NSF, NIH, DARPA, and companies such as Google and IPsoft. These strong results have in turn led to prestigious appointments for the students at universities, corporate research labs, and government labs, a virtuous cycle of mutual benefit. The programs are organized in such a way that the integrity of the individual disciplines is preserved, and the student can still be seen as a graduate in primarily X, but with additional, advanced, complementary expertise in Y. Unfortunately, these combined PhD programs are available only to students working in areas encompassed by cognitive science. As far as we know, there is currently no mechanism outside of niche interdisciplinary institutes for students to acquire similar dual degree credentials that will make them competitive in today's job market.

#### Obstacles to Interdisciplinary Relations in Research

The teaching and curricular obstacles identified above limit the ability of our faculty to forge interdisciplinary relationships in research. As members of our department who have engaged in team teaching and inter-department curricular programs will readily attest, these relationships inevitably lead to a special kind of research productivity for students and faculty, one that innovates beyond traditional disciplinary boundaries to establish valuable new and groundbreaking perspectives. Indeed, research on higher education has robustly demonstrated that interdisciplinary teaching and curricular collaborations are essential to the development of viable interdisciplinary research programs. The administration has recognized the importance of interdisciplinary faculty research by offering grants to encourage teamwork across disciplines. However, we suggest that these research teams will grow organically when we abolish barriers to interdisciplinary teaching and institutionalize an interdisciplinary curriculum option that allows students to pursue Master's and PhD combined degrees, as outlined in the next section.

#### Proposal for Graduate-Level Combined Degree Option

The fact that so many departments have now submitted white papers on the topic of interdisciplinary relations illustrates the importance of this topic to faculty at the University of Colorado Boulder. We build on these discussions by proposing a set of campus-wide templates for interdisciplinary Master's and PhD degrees that could be used to encourage the definition of new interdisciplinary programs (see Addendum A). Graduate students in good standing in any A&S academic unit would be able to apply to earn an interdisciplinary Master's or PhD that involves a second academic unit, assuming the attached suggested requirements could be met. The Graduate School could institute a diverse committee of faculty members from multiple divisions and colleges to provide oversight and official approval of such degrees.

We believe that these combined degrees will offer our university a competitive advantage in attracting a new brand of students focused on the theoretical and applied potential of interdisciplinary academic knowledge. Even more critically, we believe that the institutionalization of a combined Master's and PhD option will instigate exciting new research programs across disciplines while also revitalizing the traditional strengths of individual departments.

**ADDENDUM A**  
**Campus-wide Templates for Interdisciplinary Master's and PhD degrees**

**I. Suggested template for interdisciplinary Ph.D. degrees in A&S (or campus-wide)**

**1) Committee (a subset of the 5 person Thesis Committee)**

A three-person thesis committee comprised of at least one faculty member from each of the two relevant academic units.

**1) Required Core Courses**

A selection of core courses, totaling at least 18 hours, from both academic units that encompasses a minimum of 50%, preferably more, of the core PhD course requirements from each department, subject to approval by the thesis committee.

**2) Hours Required**

A total of 39 hours of graduate courses from both academic units that would include:

- 18 hours of core courses from both academic units, as described above.
- 21 hours of other elective courses from both academic units.
- At least 15 of the 21 elective hours must be outside the home department.

**3) Thesis Requirements**

- The original contributions of the dissertation research should exploit state-of-the-art methods from the perspective of both disciplines.
- Students are required to have their doctoral research co-supervised by two faculty members representing the two different disciplines.
- In accordance with the rules of the graduate school, students must take at least 30 hours of dissertation research.

**II. Suggested template for interdisciplinary Master's degrees in A&S (or campus-wide)**

- 2) Advisory Committee** A three-person thesis committee comprised of at least one faculty member from each of the two relevant academic units.

**2) Required Core Courses**

A selection of core courses, totaling at least 18 hours, from both academic units that encompasses a minimum of 50%, preferably more, of the core Master's course requirements from each department, subject to approval by the thesis committee.

- 3) An additional 12 hours of electives** from both departments, which could optionally include 6 thesis hours, also subject to approval by the thesis committee.

Endorsed by Vilja Hulden