Foundations of Empirical Language Research
A feasibility study for a new research-based undergraduate course

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Rationale

In the Department

• Our 2011 survey of 75 linguistics instructors found that 100% agreed or strongly agreed that students with a B.A. in Linguistics should be able to understand the principles of scientific reasoning as they apply to the study of linguistics.

• The 2012 IQAP review of undergrad programs noted that students want improvement in hands-on learning, field skills, and work-related skills.

In the Faculty

• Humanities is engaged in transforming the undergraduate curriculum, seeking to integrate opportunities for authentic, high-quality learning experiences at every level, and incorporating mentoring across levels.

At McMaster

• FWI calls for instructors to integrate research into educational activities and for students to participate in the development of new research.

Of the feasibility study

• evidence-based pedagogical development

• inter-faculty collaboration between Humanities and Science

• knowledge transfer between teaching and research faculty

• efficient adaptation and adoption of existing materials

Of the proposed course

• recruitment of strong students into Humanities

• improved preparation for upper-level work

• retention of students across levels

• students trained for research can work as RAs, leading to increased faculty productivity

• better student preparedness for careers or graduate study

• transferability of materials and course design to other departments and programs

Interim Results

Students

• 71% of surveyed students expect to work in clinical or research settings after graduation and are cautiously optimistic (5.3/7) that their degree will prepare them well.

• The largest gap between students' confidence and their importance rating was for communication skills (speaking, editing, communicating to varied audiences) and time-management and project-management skills.

• Students are skeptical of the value of collaboration (4.8) and presentations (3.8-4.7) in supporting their learning.

"All of my undergraduate students report that being in the lab gives them an enormous boost and a feeling of empowerment and they leave different people." -- a Linguistics professor

Faculty

• We should support our students in developing stronger writing skills, critical reading ability, independent thinking and argumentation.

• We all have concerns about time and resources.

Transferability

• The proposed course will draw on experiences in teaching science literacy (science communication, information skills, and research skills) within the Integrated Science (iSci) program in the Faculty of Science. In Level 1 iSci, foundational skills and techniques are developed in the context of research projects.

• In this feasibility study we are performing a needs assessment for students and faculty, to serve as the basis for selecting, adapting and transferring materials and approaches from iSci to Linguistics, and eventually, to other departments and faculties.

In this project, we are investigating the feasibility of developing a pedagogically innovative Linguistics course: Foundations of Empirical Language Research. The twelve-unit, team-taught, two-semester course would be mandatory for Level II students in Honours Linguistics and Honours Cognitive Science of Language. The course will support the development of scientific thinking, writing and presentation skills, information literacy, research methods, and statistical analysis by guiding students through the design and execution of an original collaborative research project in psycholinguistics.