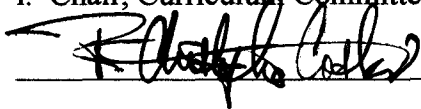


1. Title of Program: Interdisciplinary Certificate in the Empirical Study of Language.
2. Degree to be Conferred: Certificate
3. Administrative Unit Proposing Program: Institute for the Empirical Study of Language
4. Date of Submission: 15 Jan 10
5. Signatures:

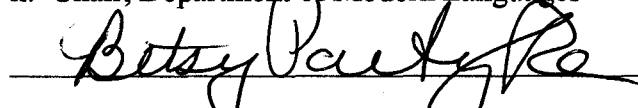
- a. Recommended for Approval

- i. Chair, Curriculum Committee, Department of Modern Languages



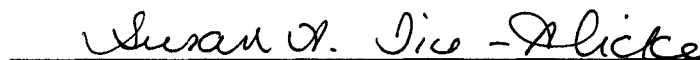
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- ii. Chair, Department of Modern Languages



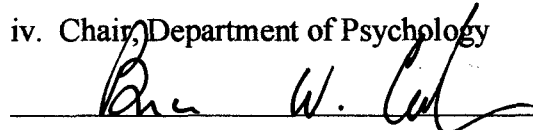
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- iii. Chair, Curriculum Committee, Department of Psychology



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- iv. Chair, Department of Psychology



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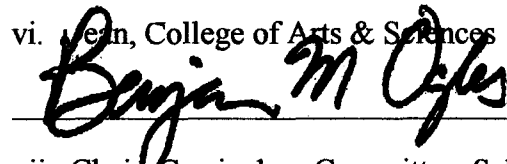
- v. Chair, Curriculum Committee, College of Arts & Sciences



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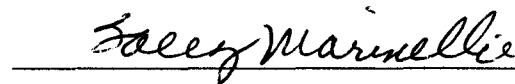
- vi. Chair, College of Arts & Sciences



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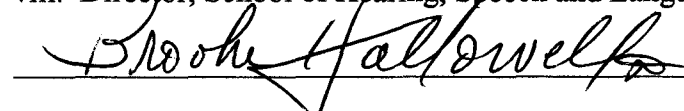
MAY 20 2010

- vii. Chair, Curriculum Committee, School of Hearing, Speech and Language Sciences



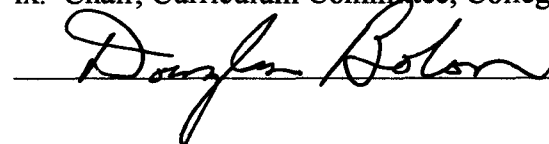
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- viii. Director, School of Hearing, Speech and Language Sciences



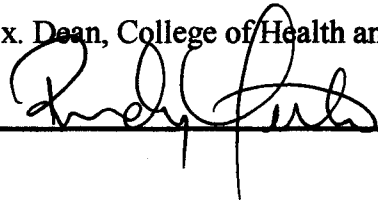
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- ix. Chair, Curriculum Committee, College of Health and Human Services



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x. Dean, College of Health and Human Services



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xi. Chair, Programs Committee

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b. Approved

i. Chair, University Curriculum Council

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## II. Introductory Descriptive Statement

The Institute for the Empirical Study of Language (IESL), approved by the Ohio University Board of Trustees in February 1996, is an Institute dedicated to bringing together individual language researchers among several departments and schools to work collaboratively. The mission of the Institute for the Empirical Study of Language is to conduct empirical research in the processes involved in the comprehension, production, and acquisition of language. Such research is ideally interdisciplinary and engages faculty, staff, graduate students, and undergraduate students.

IESL proposes a certificate in the empirical study of language as an interdisciplinary complement to any undergraduate bachelor's program. The scientific study of language is spread across multiple disciplines and is growing rapidly. The proposed program is designed to enhance the preparation for students who plan to enter graduate study in an area of language investigation that has an experimental focus. Such areas include Hearing, Speech and Language Sciences; Experimental and Applied Phonetics; Psycholinguistics; Computational Linguistics; and Instructional Design in Language Teaching. These programs are typically doctoral programs, not master's programs. They recruit from undergraduate programs that provide strong research backgrounds.

One purpose of the IESL is to enhance undergraduate training, especially research training, in areas of language study. We propose to offer a certificate program that would be available to any student in the university but would be especially appropriate for students majoring in one of the participating programs in the Institute: Linguistics; Modern Languages; Hearing, Speech and Languages Sciences; and Psychology. We propose to pool our resources to offer a certificate program that will provide additional preparation in research for undergraduates planning to enter graduate programs. The program will be interdisciplinary, requiring students to select courses from at least two of our member programs and offering them research opportunities in all four. To our knowledge, there is no program similar to the certificate program that we are proposing at any other college or university in Ohio.

The curriculum will be drawn from existing courses offered by units participating in the Institute. The faculty will be existing faculty in Linguistics; Modern Languages; Hearing, Speech and Language Sciences; and Psychology, so no new costs are envisioned for this program.

The program features a senior thesis which will give the student experience in all steps involved in a research project. The thesis will be an empirical research project, supervised by a faculty member from the IESL. In its final form, the thesis will include a review of the research literature that is relevant to the research topic, one or more hypotheses that are tested empirically, a description of the research methods used, a statement of the results of the empirical tests, and a

discussion of the theoretical significance of these results. This format, which is conventional for empirical research projects, will prepare the student for conducting more advanced research projects at the graduate level.

We plan to implement the certificate program as soon as it receives curricular approval.

### III. The Need for the Program

There is a growing body of research into normal language use, including such areas as speech perception, word recognition, the comprehension of syntax, first and second language acquisition, and discourse comprehension. There is extensive research also in language disorders, including developmental language disorders and acquired neurological communication disorders. Doctoral programs in these fields often have difficulty in attracting qualified applicants to their programs because both undergraduate and master's programs often lack training in research, focusing instead on training in applied areas. Doctorate-granting programs thus recruit most heavily from research-oriented students in bachelor programs.

For example, in the field of Hearing, Speech and Language Sciences, the Council of Academic Programs in Communication Sciences and Disorders (CAPCSD) and the American Speech-Language Hearing Association (ASHA) formed a Joint Ad Hoc Committee on the shortage of Ph.D. students and faculty in communication sciences and disorders in order to address the shortage of Ph.D. faculty in the discipline. Responses to their 2002 survey of 56 academic programs revealed that the mean age of Ph.D. faculty (sample of 575 full-time faculty) was 49 years. In conjunction with a group of faculty members who were nearing retirement, at the time of the survey there was a total of 333 unfilled Ph.D. doctoral training slots. In 2008, the Committee reported a slight improvement in the situation, based on another survey of academic programs. However, critical concerns continue as expressed by the Committee: "The trends in the data certainly are positive indicators of sustained degree generation; however, given that these data indicate that only 50% of PhD graduates assume faculty positions at a time when some faculty searches fail and faculty retirements are likely to increase, it is fair to conclude that the robustness of academe continues to be threatened." (Report of the 2008 Joint Ad Hoc Committee on PhD shortages in CSD). It is clear that the impact of the shortage of Ph.D. students and faculty is widespread. This means potentially fewer professionals, which in turn means fewer or poorer services for clients who are in need of speech, language, and hearing therapy.

We expect to admit a small number of Ohio University students to the certificate program in the first two or three years. We will advertise the program widely to our undergraduates. This program is designed to attract undergraduates who want to enter a doctoral program in some area of languages science. The number of such students is probably not large, and the amount of individual research supervision in the program limits the number of students who can participate. The advantage for the students who enter the program is in the quality of research training that

they receive. They can get individual instruction in research in several different disciplines, from several different faculty members, and using several different methodologies. This range of research training should measurably increase their chance of admission to a doctoral program

#### IV. Curriculum

The proposed certificate requires the completion of a minimum of 35 credit hours, 27 credit hours in core requirements and 8 hours of courses selected from areas outside the student's major. Students must achieve a 3.00 grade average or better by the time they graduate with the Certificate program. A student's advisor will offer suggestions about the best sequencing of courses.

#### Core Requirements

<u>Course</u>	<u>Credits</u>	<u>Prerequisites</u>
LING 270, The Nature of Language	5	None
or		
LING 350, Introduction to Linguistics	5	jr or sr
LING 330, Intro to Psycholinguistics	4	LING 270
PSY 221, Statistics for the Behavioral Sciences	5	MATH 113
PSY 226, Research Methods in Psychology	4	PSY 101, PSY 221
Individual Research Experience	min 3	
Thesis (one of the following)	6	
PSY 390, Research in Psychology	1-5, max 4	PSY 226 or perm
LING 495, Directed Research	1-2, max 4	permission
SPAN 498, Undergraduate Research	1-2, max 4	permission
FR 498, Undergraduate Research	1-2, max 4	permission
LING 499, Special Studies in Linguistics	1-3, max 3	permission
HSLs 499, Independent Reading	8	permission

#### Areas of Study

Linguistics:

LING 351, Fundamentals of General Linguistics	5
LING 360, Sounds of World Languages	4
LING 440, Introduction to Bilingualism	4
LING 460, Phonology	4
LING 470, Syntax	4
LING 475, Theories of Language Learning	4
LING 490, Sociolinguistics	4

**Modern Languages:**

FR 437, Applied Phonetics	4
FR 439, Modern French Usage	4
GER 439, Modern German Usage	4
SPAN 370, Intro to Spanish Linguistics	4
SPAN 437, Applied Phonetics	4
SPAN 438, Hispanic Dialectology	4
SPAN 439, Modern Spanish Usage	4

**Psychology:**

PSY 304, Human Learning and Cognitive Processes	4
PSY 321, Experimental Design and Analysis	5

**Hearing, Speech and Language Sciences:**

HSLs 208, Phonetics	5
HSLs 250, Speech Science	4
HSLs 253, Hearing Science	4
HSLs 310, Language Development	4
HSLs 390, Research Methods in Hearing,	
HSLs 410, Language Science	4

Even though it is not a requirement for the certificate program, we encourage all students interested in the empirical study of language to complete two years of foreign language study.

### Research Experience

Each student in the program will be assigned a faculty mentor who is a member of the IESL and who will supervise the student's research experience. The student will participate in research being conducted either by the mentor or by other IESL members. A student is required to have a minimum of three academic quarters of individual research experience. A student will sign up for one credit hour (for each of these quarters), using HSLS 499, LING 495, or 499, SPAN 498, FR 498, or PSY 390, depending on the program of the supervising IESL member. These research experiences will take place anytime during the student's sophomore or junior year. A student is encouraged to work with faculty members in current faculty research projects. Each quarter the student will move to a different faculty research project to maximize the variety of research experience. The goal of these individual research experiences is to give the student interdisciplinary experience in research participation, on different topics, with differing methodologies, with differing kinds of equipment, etc. The experiences build a student's research expertise and enhance that student's chances of being admitted to a doctoral program in a language science. If a student participates in a research project that is accepted for a conference presentation, the student will be encouraged, but not required, to attend the conference to better understand how the exchange of research ideas works at conferences. Students may also be co-authors on research projects submitted for publication.

During the senior year, the student, under the supervision of a faculty mentor from the IESL, will complete a senior thesis. The thesis is an empirical research project designed to give the student experience and skills in conducting research on language. The student's proposal for the thesis must be approved by a committee composed of three faculty members: the mentor, one other member of the IESL, and a third member with background appropriate to the student's topic. Following completion of the thesis, the student will present the thesis to the same committee for discussion and approval or disapproval. Thesis students will register for the research course in their department for up to three hours per quarter. The mentor for the student's thesis may not be away on faculty fellowship or other leave, but must be on campus during that year to supervise the student's thesis.

All the courses in the certificate program are existing courses. The sequencing of a student's courses will be at the recommendation of a student's mentor. If a student has had a relevant course in a program at another college, and that course has been given transfer credit by Ohio University, then such credit will be accepted for the certificate. Students entering the certificate program at the beginning of their sophomore year will only need to average 12 credit hours per year to complete the certificate on schedule.

The number of students enrolling in the certificate program will probably not be large enough to have a noticeable enrollment impact on the courses selected for the certificate program.

### V. Curriculum Committee

A curriculum committee, chaired by the Assistant Director for Training, will be responsible for additions, deletions, and modifications to the curriculum of the certificate program. Two additional members of the committee will be elected from among the IESL members. The committee will also handle adjustments to the programs of individual students which arise from unusual circumstances as well as course substitutions for program requirements. The Assistant Director for Training will be the point of contact for all certificate students who have questions about the program which cannot be answered by their advisors. The curriculum committee reports to the Director of IESL.

## VI. Faculty and Instruction

The courses for the certificate are existing courses and are taught by existing faculty. The minimal qualifications of faculty for the certificate program will be the qualifications set for faculty by the units participating in the Institute, namely, Linguistics, Modern Languages, Psychology, and Hearing, Speech and Language Sciences. Mentors who supervise the senior thesis will be permanent members of the IESL. All are expected to hold a doctoral degree in one of the four participating disciplines in the IESL.

## VII. Admissions Requirements

Undergraduate students enrolled in a degree program and having an overall GPA of at least 3.00 are eligible for admission to the certificate program. Interested students must:

- a. apply for the certificate program by the end of their sophomore year.
- b. compose a statement of intent, two to three pages, that outlines their reasons for wanting to be admitted to the certificate program. The statement of intent must be accompanied by a letter, addressed to the Associate Director for Training, asking for consideration for admission.

The admissions committee will give preference to students who:

- a. have been involved in language activities outside of academic coursework such as relevant volunteer experience (e.g., hospital or nursing home), volunteer work in a faculty member's research lab, or membership in the HSLs Undergraduate Research Club.
- b. are currently enrolled in one of the four academic programs in the IESL.

The greatest constraint on enrollments in the program will be our capacity to supervise senior theses. If enrollments begin to threaten that capacity, the admissions committee will limit new enrollments appropriately.

## VIII. Administration

The IESL Director, in consultation with other IESL faculty, will oversee the handling of student admissions, advising and progress.

## IX. Timing and Evaluation

No external publicity about this program has been generated. Applications for admission have not been entertained.

In the summer of each year, we will engage in a formal evaluation of the entire program. The Director and Associate Directors of the Institute will meet to review the following: numbers of admitted students, their progress, their performance, and assignment of students to mentors for theses. Specific criteria to be used to evaluate the program will include:

- a. number of students who finish the certificate program each year
- b. admission of graduates to relevant graduate programs (master's or doctoral)
- c. number of students who acquire a research job in language science
- d. number of students who finish the thesis each year as well as the overall quality of the thesis. Criteria will include whether a student had a literature review, testable research questions, a logical and clear rationale for testing them, appropriate methodology, appropriate research design and analyses, the ability to interpret and explain the experimental results, and ideas for methodological improvements and future research
- e. number of conference presentations involving students, including location and type of conference in order to assess the quality of student work
- f. number of manuscript submissions and acceptances involving students to peer-reviewed journals
- g. total number, type and quality of collaborative projects currently involving students
- h. number of credit hours required for the certificate that have been completed by each student.

#### **X. Budget and Financial**

The certificate program does not require new faculty, equipment, or resources. Each academic unit has the necessary resources to serve the certificate program. The members of the IESL anticipate that about two students from each of the departments and school participating in the IESL will enroll in the program over the course of the first two years. Further, it is not anticipated that this certificate program will cause enrollment to decline in any other programs. The overseeing college for this certificate program will be the College of Arts & Sciences.