

ENG 549: Experimental Methods in Linguistics

Spring Semester 2020

Location: XΩΔ 01 Room 006
M/TH (10:30am-12:00pm)

Instructor: Natalia Pavlou
Email: pavlou.natalia@ucy.ac.cy

Office hours: M/TH 12pm-1:30pm
TH 3pm-4pm and by appointment
Location: UCY Caffé Nero

Course Description

Overview:

This course aims to familiarize students with fundamental experimental methods used in linguistics and explore advanced psycholinguistic methods by reading articles on experimental research and discussing in detail the methodologies adopted. The course has a strong lab component, with a hands-on approach to issues related to psycholinguistic experimentation, such as experimental design and protocols, software learning, basic statistics and data analysis. Students will learn about the merits and shortcomings of different methods and experimental paradigms and will also learn to assess which methods are best suited for investigating which research questions in particular language areas. Students will also design and implement a pilot experiment in linguistics during the course of the semester, preparing them for independent laboratory work and conference participation.

Course Objectives

At the completion of this course, students will be able to:

- understand how experimental techniques can be used to answer a question of scientific interest.
- read scientific papers and critically evaluate their goals, methods, findings and interpretations.
- formulate a novel research question which can be investigated using available experimental methods.
- present the goals, methods, findings, and interpretations of a scientific paper to a group of peers.
- clearly and concisely explain in writing the goals, methods, findings, and interpretations of a project.

Course Details

Grade Distribution

Research Awareness Requirement	10%
Lab report	10%
Pilot study	(A total of 80%)
Project Topic Proposal.....	10%
Review of (2) research papers.....	10%
Final Project Presentation.....	20%
Abstract.....	10%
Final Paper.....	30%

Research Awareness Requirement

The goal of a research awareness requirement is for you to get a glimpse of how the ideas we have discussed in class are employed in a professional research environment. To satisfy the requirement, you have to attend one lab meeting and write a one-page summary of the presentation and discussion. **(one-page, 1.5 line space, due April 30)**

Lab Report

Among the skills you will learn in this class is the use of software to analyze data. We will dedicate part of this class practicing on computers on how to enter and process data to better visualize the results of our study and develop complex statistical analyses. To satisfy this requirement, you will be asked to do what you have learned on a new dataset provided to you and report your findings. **(due March 30)**

Final Project

As a final project, students are expected to implement a small-scale experiment of their choice using an experimental method we discussed in class. Students may work in groups with the instructor's approval.

A. Project Topic Proposal

Each student or group will need to submit in written form a proposal of their project, explaining the research question(s), hypotheses, methodology and importance of the project. You will use a template given to you to fill out the information related to your project. **(template provided, due February 3)**

B. Paper Review

Each student or group of students will need to find and review at least **two** papers related to their projects. This review will be the literature review that can be used in the final paper. **(up to 4 pages, 1.5 space, due February 24)**

C. Final Project Presentation

Each student or group will be asked to collect and analyze participants data and present the outcomes to the class during the **last week** of classes **(slides or handout)**.

D. Abstract

An abstract is a summary of a paper intended for presentation at an academic conference. It should be a short summary of a paper you are prepared to give in public **(one page, due scheduled final exam day)**.

E. Final Project Paper

Each student or group will be asked to submit a final paper for their project, which includes literature review, a description and analysis of the experiment (participants, methodology, results) and related discussion about the importance of their experiment **(minimum 10 pages, due scheduled final exam day)**.

Attendance/Participation

Attendance in lectures is obligatory. **Failure to attend especially the lab component of this class may result in failing the course.**

Classroom Etiquette

Students have an obligation to their classmates and instructor to behave in such a manner as to enhance the learning environment. Please do not engage in behavior which disrupts class or otherwise detracts from the ability of your fellow students to learn. Such behaviors include arriving at class late, leaving before class is dismissed, speaking while others are speaking, reading magazines in class, cell-phones ringing etc.

Textbook

Quantitative Research in Linguistics: An Introduction/ Sebastian M. Rasinger. Additional readings will be posted on Blackboard.

Tentative Schedule

The schedule on the syllabus is subject to change. Changes, if any, will be announced in class.

Wk.	<i>Monday</i>	<i>Thursday</i>
1 13/1-17/1	Introducing experimental research	The debate on Quantitative Research Gibson & Fedorenko (2010)
2 20/1-24/1	Basics of Quantitative Research S.R.: Chapter 2	Research Design S.R.: Chapter 3
3 27/1-31/1	Human Subject Research Eckert (2013) http://www.bioethics.gov.cy	Questionnaire Design S.R.: Chapter 4 Buchstaller and Khattab (2013)
4 3/2-7/2	Offline Tasks Schütze & Sprouse (2013)	Magnitude Estimation Sorace (2010)
5 10/2-14/2	Web-based studies Sprouse (2011)	Reaction Times Marinis et al. (2010)
6 17/2-21/2	Eye-movements Dussias (2010)	Data Analysis S.R.: Chapter 5
7 24/2-28/2	Data Analysis S.R.: Chapter 6	Data Analysis Chapter 7

Wk.	<i>Monday</i>	<i>Thursday</i>
8 2/3-6/3	NO CLASS	Computer Lab Excel Basics
9 9/3-13/3	Computer Lab Excel, Analysis ToolPak	Computer Lab Visualization Techniques
10 16/3-20/3	Annotation/Tagging Praat, ELAN	Annotation/Tagging Praat, ELAN
11 23/3-27/3	Class Discussion	Presentation Skills Experiments in Syntax-Semantics
12 30/3-3/4	Guest Lecture Corpus Linguistics	Presentation Skills Experiments in Semantics-Pragmatics
13 6/4-10/4	Writing skills Abstracts	Writing skills Research paper
14 27/4-30/4	Student Presentations	Student Presentations