

LT5428: EXPERIMENTAL RESEARCH IN LINGUISTICS

Effective Term

Semester A 2026/27

Part I Course Overview

Course Title

Experimental Research in Linguistics

Subject Code

LT - Linguistics and Translation

Course Number

5428

Academic Unit

Linguistics and Translation (LT)

College/School

College of Liberal Arts and Social Sciences (CH)

Course Duration

One Semester

Credit Units

3

Level

P5, P6 - Postgraduate Degree

Medium of Instruction

English

Medium of Assessment

English

Prerequisites

Nil

Precursors

Nil

Equivalent Courses

Nil

Exclusive Courses

Nil

Part II Course Details

Abstract

This course provides a rigorous introduction to experimental methods in linguistics, with a particular focus on psycholinguistics, neurolinguistics, and quantitative approaches to language research. Students learn how to formulate research questions, operationalize linguistic constructs, design controlled experiments, collect data, and conduct basic statistical analyses. The course emphasizes conceptual clarity, methodological validity, and reproducible research practices. Upon completion, students will be able to design, justify, and evaluate experimental studies in linguistics and related field.

Course Intended Learning Outcomes (CILOs)

CILOs		Weighting (if app.)	DEC-A1	DEC-A2	DEC-A3
1	Identify core principles underlying experimental research in linguistics, including measurement, validity, reliability, and ethical research practices.		x	x	x
2	Design controlled experiments that address empirical questions in linguistics and language cognition.		x	x	x
3	Collect and analyze behavioural or linguistic data using appropriate tools and statistical methods.		x	x	x
4	Critically evaluate published experimental studies and communicate research findings clearly and accurately.		x	x	x

A1: Attitude

Develop an attitude of discovery/innovation/creativity, as demonstrated by students possessing a strong sense of curiosity, asking questions actively, challenging assumptions or engaging in inquiry together with teachers.

A2: Ability

Develop the ability/skill needed to discover/innovate/create, as demonstrated by students possessing critical thinking skills to assess ideas, acquiring research skills, synthesizing knowledge across disciplines or applying academic knowledge to real-life problems.

A3: Accomplishments

Demonstrate accomplishment of discovery/innovation/creativity through producing /constructing creative works/new artefacts, effective solutions to real-life problems or new processes.

Learning and Teaching Activities (LTAs)

LTAs		Brief Description	CILO No.	Hours/week (if applicable)
1	Reading	Students will read academic books and articles.	1, 2, 3, 4	3 hours
2	Lecture	Students will attend lectures introducing key concepts in experimental design, operationalization, measurement, and analysis.	1, 2, 3, 4	3 hours

3	Class activities	Students will participate in activities involving experiment construction, data collection, coding, and interpretation.	1, 2, 3, 4	3 hours
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Assessment Tasks / Activities (ATs)

	ATs	CILO No.	Weighting (%)	Remarks ("- " for nil entry)	Allow Use of GenAI?
1	In-class experimental design tasks	1, 2, 3	30	Students can use GenAI tools to brainstorm, gather information, solve problems, format references, and edit language. Students should give proper acknowledgment to all the content from GenAI tools that they incorporated into the assignment and keep a journal of their GenAI conversations. Students should not present texts generated or translated by GenAI tools as their own original work.	Yes

2	Research report (2,000 words)	1, 2, 3, 4	30	Students can use GenAI tools to brainstorm, gather information, solve problems, format references, and edit language. Students should give proper acknowledgment to all the content from GenAI tools that they incorporated into the assignment and keep a journal of their GenAI conversations. Students should not present texts generated or translated by GenAI tools as their own original work.	Yes
3	End-of-term test	1, 2, 3, 4	40	-	No

Continuous Assessment (%)

100

Assessment Rubrics (AR)**Assessment Task**

In-class experimental design tasks.

Criterion

Demonstrate understanding of experimental design in linguistics, including the ability to analyze methodological choices, evaluate empirical evidence, and identify strengths and limitations of published studies.

Excellent (A+, A, A-)

Demonstrate strong evidence of capacity to analyze and synthesize; superior grasp of core principles of experimental design in linguistics; and evidence of excellent understanding of how methodological decisions affect empirical claims.

Good (B+, B, B-)

Demonstrate good evidence of capacity to analyze and synthesize; clear grasp of the main principles of experimental design; and evidence of good understanding of how methodological choices bear on empirical interpretation.

Fair (C+, C, C-)

Demonstrate some evidence of ability to evaluate experimental work; adequate understanding of basic principles of research design; and reasonable awareness of how methodological issues relate to linguistic interpretation.

Marginal (D)

Demonstrate limited ability to evaluate experimental work; minimal understanding of methodological principles; and only partial awareness of how methodological issues relate to linguistic analysis.

Failure (F)

Demonstrate inadequate understanding of experimental research; failure to identify key methodological components; and little to no evidence of ability to analyze or interpret empirical claims.

Assessment Task

Research report (2,000 words).

One research paper on topics related to language and its applications.

Criterion

Demonstrate the ability to design a small-scale linguistic experiment, including formulation of a clear research question, justification of methodological choices, and development of appropriate procedures for data collection and analysis.

Excellent (A+, A, A-)

Demonstrate the ability to design a small-scale linguistic experiment, including formulation of a clear research question, justification of methodological choices, and development of appropriate procedures for data collection and analysis.

Good (B+, B, B-)

Demonstrate good evidence of ability to design a feasible experiment; clear grasp of task selection and measurement; and evidence of good understanding of methodological justification.

Fair (C+, C, C-)

Demonstrate some ability to design an experiment; adequate understanding of task structure and measurement; and basic justification of methodological decisions.

Marginal (D)

Demonstrate limited ability to design an experiment; minimal understanding of task structure and measurement; and insufficient justification of methodological choices.

Failure (F)

Demonstrate inadequate ability to design an experiment; failure to articulate a coherent research question or method; and little to no justification of procedural or analytical decisions.

Assessment Task

End-of-term test.

Criterion

Demonstrate the ability to conduct and report an empirical study in linguistics, including data collection, quantitative analysis, interpretation of results, and clear academic presentation consistent with standards of experimental linguistics.

Excellent (A+, A, A-)

Demonstrate strong evidence of capacity to collect, analyze, and interpret data; superior command of quantitative methods; and evidence of excellent understanding of how results relate to theoretical issues in linguistics.

Good (B+, B, B-)

Demonstrate good evidence of ability to collect and analyze data; solid command of statistical procedures; and evidence of good understanding of how results bear on theoretical questions.

Fair (C+, C, C-)

Demonstrate some evidence of ability to collect and analyze data; adequate application of statistical procedures; and reasonable interpretation of results in relation to linguistic theory.

Marginal (D)

Demonstrate limited ability to collect or analyze data; minimal application of statistical procedures; and only partial or unclear interpretation of results.

Failure (F)

Demonstrate inadequate execution or reporting of empirical work; failure to collect or analyze data appropriately; and little to no interpretation of results in relation to linguistic theory.

Part III Other Information

Keyword Syllabus

Experimental linguistics; research design; operationalization; sampling; behavioural measures; reaction-time paradigms; self-paced reading; eye-tracking; EEG; statistical inference; R for linguistics; ethics in human research.

Reading List

Compulsory Readings

Title	
1	Lecture notes/slides/readings for the course.
2	Podesva, R. J., & Sharma, D. (Eds.). (2014). Research methods in linguistics. Cambridge University Press.

Additional Readings

Title	
1	Unsworth, S., & Blom, E. (2010). Experimental methods in language acquisition research.