

ENGE3610 Psycholinguistics

1. Course Code: ENGE3610

2. Title in English: Psycholinguistics

3. Title in Chinese: 心理語言學

4. Course description

This course explores how language is represented, processed, and learned in the human mind, drawing on insights from linguistics, psychology, and cognitive science. Students will examine how we perceive speech, recognize words, comprehend and produce sentences, and acquire language across the lifespan. Emphasis is placed on understanding experimental methods used in psycholinguistic research, including reaction time tasks, eye-tracking, and EEG studies. Through hands-on projects using Gorilla and basic statistical analysis in R, students will engage with core theoretical debates while developing the skills to critically design, interpret, and evaluate empirical studies in language processing and learning.

5. Learning outcomes

By the end of the course, students are expected to attain the following learning outcomes:

- Explain key concepts and theories in psycholinguistics, including how language is perceived, produced, and acquired in the human mind.
- Compare and evaluate major experimental methods used in psycholinguistics, such as reaction time, eye-tracking, and EEG studies.
- Design and conduct a small-scale psycholinguistic experiment using an online platform (e.g., Gorilla) and collect behavioural data.
- Perform basic statistical analysis using R and interpret the results in relation to theoretical questions in language processing.

6. Course syllabus

Topic	Contents/fundamental concepts
Speech perception	This section focuses on the concepts of phoneme, allophone, categorical vs. continuous perception, etc. Also, a couple of speech perception tasks (e.g., AX discrimination task, forced-choice identification task) are introduced.
Word recognition	This section presents key concepts in lexical processing, such as facilitation, inhibition, priming, lexical decision task, frequency, cohort vs. trace model, phonological/semantic neighbor, etc. As a hands-on activity, a lexical decision task is administered and its pros and cons are discussed.
Sentence comprehension	Main concepts in this section include parsing, parser, incrementality, garden-path sentence, Shallow Structure Hypothesis, L2 parsing strategies, proficiency, and cognitive burden.
Research	This section introduces experimental design, hypothesis testing,

methods in Psycholinguistics	and data interpretation through hands-on participation in comprehension tasks.
Experimental Design and Stimuli Development	How to improve language stimuli is discussed in a group. As a product of group discussions, a variety of creative ways to improve previous language stimuli are presented by students.
Computational Perspectives on Language	This topic contrasts human and machine language processing, highlighting what current models reveal (and miss) about human cognition.
Mini Project: Experimental Design and Analysis	In groups, students will design and run a small-scale online experiment using Gorilla, analyze behavioural data in R, and present their findings.
Sentence production	This section contrasts sentence production and comprehension. As the sentence production processes, planning and articulation are introduced.

7. Course components (Learning activities)

Teaching Modes and Learning Activities	
On-site face-to-face	Notional Learning Hours
Contact Hours	
Lecture	26
Tutorial and Workshop	13
Consultation	1
Self-Study Hours	
Reading	20
Preparation for Article Critique	10
Preparation for Final Project	25
Preparation for Final Quiz	25

8. Assessment type, percentage and rubrics

Course requirements and grading breakdown

Assessment type	Percentage
Participation and contribution to class discussion	10%
Case Study	20%
Mini experimental project: (a) project proposal (15%) (b) presentation (15%) (c) individual follow-up question and answer (10%)	40%
Final Test	30%

Assessment Guidelines

- **Participation and contribution to class discussion (10%)**

Students are expected to attend class punctually and participate in learning activities (e.g., hands-on activities, discussions) conducted in class.

Case Study (20%)

Students will submit an individual written case study (approx. 1,000–1,200 words) analyzing a short dataset drawn from one of the in-class experimental tasks (the Week 4 lexical decision task or Week 5 self-paced reading task). Each student will receive an individualized summary of results (e.g., a small table of reaction times or accuracy by condition). The case study should situate the pattern within relevant theoretical debates covered in class and critically discuss what the results do and do not support. Feedback will support students' preparation for their own experimental project.

- **Mini Experimental Project (40%)**

Students will work in small groups of 3-4 to design and run a small-scale online psycholinguistic experiment using Gorilla, collect behavioural data, and reflect on their findings. This project is divided into three components:

- *Project Proposal (15%)*

Groups will submit a short proposal outlining their research question, rationale, experimental design, hypotheses, and planned analyses. The proposal should show clear links to course topics and existing research.

- *Presentation (15%)*

Each group will present their experiment in class, covering their research question, design, stimuli, results (e.g., reaction time plots, summary statistics), and interpretation. The main focus of evaluation will be the quality and depth of the content, rather than presentation style or delivery. Students are required to submit their presentation package (including PowerPoint slides) by **Week 12** for formal assessment.

- *Individual Follow-Up Question and Answer (10%)*

Following the **15-minute** group presentation, each student will answer one or more questions from the instructor and peers to demonstrate individual understanding of

the project. This component ensures each member can explain key aspects of the experiment, design choices, and data interpretation.

- **Final quiz (30%)**

The final quiz assesses students' understanding of key concepts, theories, and findings in psycholinguistics, as well as their ability to apply critical thinking to interpret data and solve problems. It includes a mix of true/false, short-answer, paragraph, and data interpretation questions based on the topics and tasks covered in class.

9. Required and recommended readings

Required materials:

- ★ Sedivy, J. (2020). *Language in mind: An introduction to psycholinguistics* (2nd ed.). Oxford University Press.
- Jiang, N. (2012). *Conducting Reaction Time Research in Second Language Studies*. Routledge.
- Jiang, N. (2004). Morphological insensitivity in second language processing. *Applied Psycholinguistics*, 25, 603–621, 622–625.
- Gries, S. T. (2021). (Generalized linear) mixed-effects modeling: A learner corpus example. *Language Learning*, 71(3), 757–798. <https://doi.org/10.1111/lang.12448>
- Wong, M.H.I. (2025). A Bayesian approach to small sample size: Mixed-effects modeling in L2 interventional research. *Research in Applied Linguistics*, 4(3), 100231. <https://doi.org/10.1016/j.rmal.2025.100231>

→ Textbook, which is available in an electronic format at our library website

Recommended materials:

- Altmann, G. T., & Kamide, Y. (1999). Incremental interpretation at verbs: Restricting the domain of subsequent reference. *Cognition*, 73, 247–264.
- CUHK Language Processing Lab. (n.d.). *Language Processing Forum*. CUHK. <https://cuhklpl.github.io/forum.html>
- Traxler, M. J. (2011). *Introduction to psycholinguistics: Understanding language science*. West Sussex, UK: Wiley-Blackwell.
- Warren, P. (2013). *Introducing psycholinguistics*. New York, NY: Cambridge University Press.
- Wen, Z., Miyao, M., Takeda, A., Chu, W., & Schwartz, B. D. (2010). Proficiency effects and distance effects in nonnative processing of English number agreement. In K. Franich, K. M. Iserman & L. L. Keil (Eds.), *Proceedings of the 34th Annual Boston University Conference on Language Development* (pp. 445–456). Somerville, MA: Cascadilla Press.

10. Course schedule

Week	Topic	Readings	Remarks
1	Introduction to Psycholinguistics	Language in mind: Chapters 2–3 Hands-on activity: Sneak peek into the future	Bring your laptop (headphones as well if you could!)
2	Speech Perception	Language in mind: Chapters 7.1–7.2	
3	Research Methods Primer	Introduction to experimental design, hypothesis testing, and reading data patterns	
4	Word Recognition	Language in mind: Chapters 8.1, 8.3 Hands-on activity: Lexical decision task Tutorial: What can you research using a lexical decision task?	Bring your laptop Project topics sign up
4	Sentence Comprehension I: Parsing	Language in mind: Chapters 9.1–9.3 Tutorial: Self-paced reading task Guide to Case Study	Bring your laptop
5	Sentence Comprehension II: L2 Parsing	Jiang (2004)	
6	Research Methods in Applied Psycholinguistics	Jiang (2012) Chapter 1	Case Study Submission
7	Gorilla Workshop: Experimental Design & Stimuli	Jared et al., 2013	Bring your laptop

8	Gorilla Workshop II & Mixed-Effects Modelling	Jaeger, 2008; Wong & Prange 2024	Bring your laptop Project Proposal Submission
9	Sentence production	Language in mind: Chapters 10.1–10.2, 10.4 Tutorial: Speech vs. writing	Bring your laptop
10	Machine vs. human language processing	Gao et al., 2024; Prange & Wong, 2023	-
11	Student Presentations	Guide to Final Quiz	PowerPoint Slides Submission
12	Final Quiz		

11. Feedback for Evaluation

Students will receive formative feedback throughout the course via in-class discussions, tutorial consultations, and group project guidance. Oral feedback will be provided after presentations and during the individual Q&A sessions. Written feedback will be given on major assignments such as the article critique and project proposal. Students are encouraged to seek further clarification or support during office hours or via email.

12. Contact details for teacher

Professor/Lecturer/Instructor:	
Name:	Wong Man Ho Ivy
Office Location:	TBC
Telephone:	TBC
Email:	manhoivywong@cuhk.edu.hk
Teaching Venue:	TBC
Website:	NA
Other information:	NA

13. Details of course website

Blackboard will be used for sharing resources.

14. Academic honesty and plagiarism

Attention is drawn to University policy and regulations on honesty in academic work, and to the disciplinary guidelines and procedures applicable to breaches of such policy and regulations. Details may be found at <http://www.cuhk.edu.hk/policy/academichonesty/>.

With each assignment, students will be required to submit a signed declaration ([https://www.cuhk.edu.hk/policy/academichonesty/Eng_hm_files_\(2013-14\)/p10.htm](https://www.cuhk.edu.hk/policy/academichonesty/Eng_hm_files_(2013-14)/p10.htm)) that they are aware of these policies, regulations, guidelines and procedures.

- In the case of group projects, all members of the group should be asked to sign the declaration, each of whom is responsible and liable to disciplinary actions, irrespective of whether he/she has signed the declaration and whether he/she has contributed, directly or indirectly, to the problematic contents.
- For assignments in the form of a computer-generated document that is principally text-based and submitted via VeriGuide, the statement, in the form of a receipt, will be issued by the system upon students' uploading of the soft copy of the assignment.
- Students are fully aware that their work may be investigated by AI content detection software to determine originality.
- Students are fully aware of the AI approach(es) adopted in the course. In the case where some AI tools are allowed, students have made proper acknowledgment and citations as suggested by the course teacher.

Assignments without a properly signed declaration will not be graded by teachers.

Only the final version of the assignment should be submitted via VeriGuide.

The submission of a piece of work, or a part of a piece of work, for more than one purpose (e.g. to satisfy the requirements in two different courses) without declaration to this effect shall be regarded as having committed undeclared multiple submissions. It is common and acceptable to reuse a turn of phrase or a sentence or two from one's own work; but wholesale reuse is problematic. In any case, agreement from the course teacher(s) concerned should be obtained prior to the submission of the piece of work.

The copyright of the teaching materials, including lecture notes, assignments and examination questions, etc., produced by staff members/ teachers of The Chinese University of Hong Kong (CUHK) belongs to CUHK. Students may download the teaching materials produced by the staff members/ teachers from the Learning Management Systems, e.g. Blackboard, adopted by CUHK for their own educational use, but shall not distribute/ share/ copy the materials to a third-party without seeking prior permission from the staff members/ teachers concerned.

15. Use of Generative Artificial Intelligence (AI) Tools in Teaching, Learning and Assessment

Approach 2 - Use only with explicit acknowledgement

Students may use some AI tools in some class activities and assignments on the condition that they make explicit acknowledgement and proper citations of the input from AI tools.

Acknowledging support from AI tools

Students are required to acknowledge all functional uses of a generative AI tool and cite it when they paraphrase, quote, or incorporate into their own work any content (whether it is text, image, data, or other format) that was created by it.

- An example of acknowledgement
I acknowledge the use of (name of AI tool – e.g. ChatGPT (<https://chat.openai.com/>) to (specify the support, e.g. plan my essay, generate some ideas for the content, ask for examples of data collection instruments, get the dates of historical events, etc.).
- An example of citation
OpenAI. (2023). ChatGPT (Mar 20 version). <https://chat.openai.com/chat>
- [An example of including texts generated by an AI tool in their work](#)
*The following text was generated by an AI tool / language model (ChatGPT):
[Insert the text generated by ChatGPT here.]*
- [An example of including texts generated by an AI tool and the prompts that were used to elicit the text from the AI tool](#)
*[The prompt], as generated by an AI language model (ChatGPT):
[Insert the text generated by ChatGPT in response to the prompt.]*

Students should clarify with the course teacher and obtain permission if necessary when in doubt.

See <https://libguides.lib.cuhk.edu.hk/c.php?g=917899&p=6975970> for using AI information responsibly for your assignments!

16. Course grade descriptors

Grade A / Excellent : **Outstanding** performance on **ALL** learning outcomes.

Demonstrates the ability to synthesize and apply the principles or skills learned in the course in a manner that would surpass the normal expectations at this level and typical of standards that may be common at higher levels of study. The 'A' grade should be reserved for truly excellent work that exceeds the level expected for the majority of students and are expected to be achieved only by a small minority

Grade A- / Very Good : Generally **outstanding** performance on **ALMOST ALL** learning outcomes.

Demonstrates the ability to synthesize and apply the principles or skills learned in the course in a manner that would fully fulfill the normal expectations at this level and occasionally reaches standards that may be common at higher levels of study.

Grade B+ / Good (Plus): **HIGH** performance on all learning outcomes, OR **HIGH** performance on some learning outcomes which compensates **WELL** for slightly less satisfactory performance on others, resulting in overall substantial performance.

Demonstrates the ability to apply **WELL** the principles or skills learned in the course in a comprehensive manner that would sufficiently fulfill the normal expectations at this level **WELL**.

Grade B / Good: **SUBSTANTIAL** performance on all learning outcomes, OR **SUBSTANTIAL** performance on some learning outcomes which compensates for slightly less satisfactory performance on others, resulting in overall substantial performance.

Demonstrates the ability to apply the principles or skills learned in the course in a **MORE COMPREHENSIVE** manner that would sufficiently fulfill the normal expectations at this level.

Grade B- / Good (Minus): GOOD performance on all learning outcomes, OR GOOD performance on some learning outcomes which compensates for slightly less satisfactory performance on others, resulting in overall substantial performance.

Demonstrates the ability to apply the principles or skills learned in the course in a COMPREHENSIVE manner that would sufficiently fulfill the normal expectations at this level.

Grade C+ / Fair (Plus): VERY SATISFACTORY performance on the majority of learning outcomes.

Demonstrates the ability to apply the principles or skills learned in the course in a SOMEWHAT SUSTAINED manner that would meet the basic requirement at this level.

Grade C / Fair : SATISFACTORY performance on the majority of learning outcomes.

Demonstrates the ability to partially apply the principles or skills learned in the course in a manner that would meet the basic requirement at this level.

Grade C- / Fair (Minus): SOMEWHAT SATISFACTORY performance on A NUMBER OF learning outcomes.

Demonstrates the ability to SOMEWHAT apply the principles or skills learned in the course in a manner that would meet the BARE basic requirement at this level.

Grade D+ / Pass (Plus): BARELY SATISFACTORY performance on a A FEW learning outcomes.

Addresses the course inadequately by meeting the basic requirement at this level only in some areas while responding minimally with possibly tangential content in others.

Grade D / Pass: ALMOST BARELY satisfactory performance on VERY FEW learning outcomes.

Addresses the course inadequately by meeting the basic requirement at this level only in very few areas while responding very minimally with possibly tangential content in others.

Grade F / Failure : Unsatisfactory performance on a number of learning outcomes, OR failure to meet specified assessment requirements.

Fails to address the course and likely does not understand what the course requires. In other words, the work completely misses the point.