Subject Code	FH6304
Subject Title	Translation and Interpreting Studies: Quantitative and Empirical Methods
Credit Value	3
Level	6
Pre-requisite/ Co-requisite/ Exclusion	N/A
Objectives	This is an advanced course designed for doctoral students in the field of translation and interpreting studies or in any neighbouring disciplines. This course aims: 1. To provide students with a comprehensive understanding of computational linguistics methods and theories as applied to translation and interpreting studies. 2. To acquaint students with recent research trends and developments in the field of translation and interpreting studies, focusing on the integration of NLP, computational linguistics, and advanced statistical analysis approaches. 3. To equip students with the necessary skills to conduct empirical research in translation and interpreting studies using computational linguistics techniques by introducing relevant research topics.
Intended Learning Outcomes *(Note 1)*	Upon completion of the subject, students will be able to: a. Demonstrate a deep understanding of the theoretical foundations of translation and interpreting studies from a computational linguistics perspective. b. Critically evaluate and discuss recent research trends in the field of translation and interpreting studies, with a focus on some relevant research topics in this field, such as the use of dependency-based syntactic indicators, entropy, and linguistic laws to examine translation and interpreting. c. Design and conduct empirical studies in translation and interpreting studies using computational linguistics tools and methodologies. d. Present research findings effectively through oral presentations and term papers. e. Collaborate effectively in interdisciplinary teams to address research questions in translation and interpreting studies.
Subject Synopsis/ Indicative Syllabus (Note 2)	Topics covered: • Introduction to Translation and Interpreting Studies: A Computational Linguistics Perspective • Corpus-Based Translation and Interpreting Studies • Statistical Analysis Techniques in Translation and Interpreting Studies

	· The Role of Syntactic Dependency in Translation and Interpreting · Entropy-Based Methods for Analyzing Translation and Interpreting Phenomena · Linguistic Laws and Their Impact on Translation and Interpreting Studies · Recent Developments and Progress in the Computational Linguistics Approach to Translation and Interpreting Studies
Teaching/Learning Methodology	The course will employ a variety of teaching methods. Lectures and guest lectures will be provided to equip students with theoretical foundations and insights. Students will independently design and conduct research projects, present their findings orally, and complete a term paper. Practical exercises and software tools will be utilized to conduct data analysis. Peer review and feedback will foster collaboration and academic integrity.

Assessment Methods in Alignment with Intended Learning Outcomes

Specific assessment methods/tasks	% weighting	Intended subject learning outcomes to be assessed (Please tick as appropriate)				
		a	b	c	d	e
1. In-class assessment	10%	✓	✓	✓	✓	✓
2. Presentation	30%	✓	✓	✓	✓	✓
3. Term paper	60%	✓	✓	✓	✓	✓
Total	100 %					

Students' knowledge and thinking abilities can be best assessed by face-to-face presentation/discussion and term papers.

Student Study Effort Expected

Class contact:	
▪ Seminar	39 Hrs.
Other student study effort:	
▪ Reading	58 Hrs.
▪ Research activities	35 Hrs.
Total student study effort	132 Hrs.

Reading List and References

Gambier, Y., & Van Doorslaer, L. (Eds.). (2016). *Border crossings: Translation studies and other disciplines* (Vol. 126). John Benjamins Publishing Company.

Han, C., Lu, X., & Zhang, P. (2023). Use of statistical methods in translation and interpreting research: A longitudinal

quantitative analysis of eleven peer-reviewed journals (2000–2020). *Target*.

Hansen-Schirra, S., & Neumann, S. (Eds.). (2017). Advances in Translation Studies. Routledge.

Jiang, X., & Jiang, Y. (2020). Effect of dependency distance of source text on disfluencies in interpreting. *Lingua*, *243*, 102873.

Jiang, Y., & Ma, R. (2022). Does Menzerath–Altmann Law Hold True for Translational Language: Evidence from Translated English Literary Texts. *Journal of Quantitative Linguistics*, *29*(1), 37-61.

Koehn, P. (2010). Statistical machine translation. Cambridge University Press.

Laviosa, S. (2014). Corpus-based Translation Studies: Theory, Findings, Applications. Bloomsbury Publishing.

Lei, L., Wen, J., 2020. Is dependency distance experiencing a process of minimization? A diachronic study based on the State of the Union addresses. *Lingua*, *239*, 102762.

Liu, K., Liu, Z., & Lei, L. (2022). Simplification in translated Chinese: An entropy-based approach. *Lingua*, *275*, 103364.

Mellinger, C., & Hanson, T. (2016). *Quantitative research methods in translation and interpreting studies*. Routledge.

Xu, H., & Liu, K. (2023). Syntactic simplification in interpreted English: Dependency distance and direction measures. *Lingua*, *294*, 103607.

Liu, H. (2008). Dependency distance as a metric of language comprehension difficulty. *Journal of Cognitive Science*, *9*(2), 159-191.

Liu, K., Ye, R., Zhongzhu, L., & Ye, R. (2022). Entropy-based discrimination between translated Chinese and original Chinese using data mining techniques. *Plos one*, *17*(3), e0265633.

Liu, K., Liu, Z., & Lei, L. (2022). Simplification in translated Chinese: An entropy-based approach. *Lingua*, *275*, 103364.

Mellinger, C., & Hanson, T. (2016). *Quantitative research methods in translation and interpreting studies*. Routledge.

Xu, H., & Liu, K. (2023). Syntactic simplification in interpreted English: Dependency distance and direction measures. *Lingua*, *294*, 103607.