

**City University of Hong Kong
Course Syllabus**

**offered by Department of Linguistics and Translation
with effect from Semester A 2024 / 25**

Part I Course Overview

Course Title: Computational Lexicography

Course Code: LT5457

Course Duration: One Semester

Credit Units: 3

Level: P5

Medium of Instruction: English

Medium of Assessment: English

Prerequisites:
(Course Code and Title) Nil

Precursors:
(Course Code and Title) Nil

Equivalent Courses:
(Course Code and Title) Nil

Exclusive Courses:
(Course Code and Title) Nil

Part II Course Details

1. Abstract

This course aims to introduce students to the theoretical and practical issues in the compilation of conventional dictionaries and computational lexicons, with particular focus on the use of computers and corpora in contemporary practice. Students will acquire the techniques in discovering word usage and distinguishing word senses from corpus data as an essential step in composing a word entry in a dictionary. The construction of lexical resources especially semantic lexicons for machine use and methods for automatic lexical acquisition will also be discussed.

2. Course Intended Learning Outcomes (CILOs)

(CILOs state what the student is expected to be able to do at the end of the course according to a given standard of performance.)

No.	CILOs	Weighting (if applicable)	Discovery-enriched curriculum related learning outcomes (please tick ✓ where appropriate)		
			A1	A2	A3
1.	Critically compare the design and content of various kinds of printed/electronic dictionaries and lexical resources.	20%	✓	✓	✓
2.	Competently describe and discuss the role of computers and corpora in contemporary dictionary making for human and/or machine use.	30%	✓		
3.	Accurately analyse the different aspects of word meaning from corpus data.	30%	✓	✓	✓
4.	Innovatively plan a small-scale lexicographic project and implement it by applying the techniques discussed in class.	20%	✓	✓	✓
		100%			

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 self-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.

3. Learning and Teaching Activities (LTAs)

(LTAs designed to facilitate students' achievement of the CILOs.)

LTA	Brief Description	CILO No.						Hours/week (if applicable)
		1	2	3	4			
1	Lectures to explain the theoretical and practical issues in dictionary making, and the use of computers and corpora in lexicography and automatic lexical acquisition.	✓	✓	✓	✓			
2	Teacher-facilitated class/group discussions on assigned readings.	✓	✓					
3	Hands-on exercises on analysing corpus data for definition writing and example selection, and using computational tools to extract lexical information from large corpora.			✓	✓			

4. Assessment Tasks/Activities (ATs)

(ATs are designed to assess how well the students achieve the CILOs.)

Assessment Tasks/Activities	CILO No.						Weighting	Remarks
	1	2	3	4				
Continuous Assessment: 100%								
Class discussions and practical exercises	✓	✓	✓	✓			30%	
Quiz to assess students' mastery of concepts and techniques covered in class	✓	✓	✓				20%	
Written report and class presentation for a small-scale group project				✓			50%	
Examination: % (duration: , if applicable)							100%	

5. Assessment Rubrics

(Grading of student achievements is based on student performance in assessment tasks/activities with the following rubrics.)

Applicable to students admitted before Semester A 2022/23 and in Semester A 2024/25 & thereafter

Assessment Task	Criterion	Excellent (A+, A, A-)	Good (B+, B, B-)	Fair (C+, C, C-)	Marginal (D)	Failure (F)
1. Class discussions and practical exercises	Demonstrate involvement in class discussion and ability to tackle practical exercises.	Demonstrate excellent involvement in class discussion and ability to tackle practical exercises.	Demonstrate good involvement in class discussion and ability to tackle practical exercises.	Demonstrate adequate involvement in class discussion and ability to tackle practical exercises.	Demonstrate little involvement in class discussion and ability to tackle practical exercises.	Demonstrate virtually no involvement in class discussion and ability to tackle practical exercises.
2. Quiz	Demonstrate understanding of the basic concepts of computational lexicography and ability to analyse related issues.	Demonstrate excellent understanding of the basic concepts of computational lexicography and ability to analyse related issues.	Demonstrate good understanding of the basic concepts of computational lexicography and ability to analyse related issues.	Demonstrate adequate understanding of the basic concepts of computational lexicography and ability to analyse related issues.	Demonstrate little understanding of the basic concepts of computational lexicography and ability to analyse related issues.	Demonstrate virtually no understanding of the basic concepts of computational lexicography and ability to analyse related issues.
3. Written report and class presentation	Demonstrate through presentation and report writing the ability to analyse and critically appreciate fundamental issues in computational lexicography.	Demonstrate through presentation and report writing excellent ability to analyse and critically appreciate fundamental issues in computational lexicography.	Demonstrate through presentation and report writing good ability to analyse and critically appreciate fundamental issues in computational lexicography.	Demonstrate through presentation and report writing adequate ability to analyse and critically appreciate fundamental issues in computational lexicography.	Demonstrate through presentation and report writing little ability to analyse and critically appreciate fundamental issues in computational lexicography.	Demonstrate through presentation and report writing virtually no ability to analyse and critically appreciate fundamental issues in computational lexicography.

Applicable to students admitted from Semester A 2022/23 to Summer Term 2024

Assessment Task	Criterion	Excellent (A+, A, A-)	Good (B+, B)	Marginal (B-, C+, C)	Failure (F)
1. Class discussions and practical exercises	Demonstrate involvement in class discussion and ability to tackle practical exercises.	High	Significant	Basic	Not reaching marginal level
2. Quiz	Demonstrate understanding of the basic concepts of computational lexicography and ability to analyse related issues.	High	Significant	Basic	Not reaching marginal level
3. Written report and class presentation	Demonstrate through presentation and report writing the ability to analyse and critically appreciate fundamental issues in computational lexicography.	High	Significant	Basic	Not reaching marginal level

Part III Other Information (more details can be provided separately in the teaching plan)

1. Keyword Syllabus

(An indication of the key topics of the course.)

Dictionary types: monolingual/bilingual printed/electronic dictionaries, thesauri, computational lexicons, machine-readable vs machine-usable dictionaries

Word entries: lexical information, word meaning, polysemy and sense distinction, usage and examples, illustrations, semantic relations, multi-word expressions, idiomaticity, terminology

Lexicographic practice: corpus-based lexicography, monolingual and parallel corpora, dictionary project, automatic lexical acquisition, dictionary access, cognitive aspects

2. Reading List

2.1 Compulsory Readings

(Compulsory readings can include books, book chapters, or journal/magazine articles. There are also collections of e-books, e-journals available from the CityU Library.)

1.	Boguraev, B. and Briscoe, T. (Eds.) (1989) <i>Computational Lexicography for Natural Language Processing</i> . London: Longman.
2.	Halliday, M.A.K., Teubert, W., Yallop, C. and Čermáková, A. (2004) <i>Lexicology and Corpus Linguistics: An Introduction</i> . London and New York: Continuum.
3.	Jackson, H. (2002) <i>Lexicography: An Introduction</i> . London and New York: Routledge.

2.2 Additional Readings

(Additional references for students to learn to expand their knowledge about the subject.)

1.	Jackson, H. and Ze Amvela, E. (2000) <i>Words, Meaning and Vocabulary: An Introduction to Modern English Lexicology</i> . London and New York: Continuum.
2.	Landau, S.I. (2001) <i>Dictionaries: The Art and Craft of Lexicography</i> . Cambridge University Press.
3.	Ooi, V.B.Y. (1998) <i>Computer Corpus Lexicography</i> . Edinburgh University Press.
4.	Sinclair, J. (Ed.) (1987) <i>Looking Up: An Account of the COBUILD Project in Lexical Computing</i> . London and Glasgow: Collins ELT.
5.	李明、周敬華 (2001) 《雙語詞典的編纂》，上海：上海外語教育出版社。
6.	章宜華 (2002) 《語義學與詞典釋義》，上海：上海辭書出版社。
7.	陳炳超 (1991) 《辭書編纂學概論》，上海：復旦大學出版社。

2.3 Online Resources

ACL Anthology <http://aclweb.org/anthology-new>
Sketch Engine <http://www.sketchengine.co.uk/>
WordNet <http://wordnet.princeton.edu>