

LT3224: COMPUTATIONAL LEXICOGRAPHY

Effective Term

Semester B 2022/23

Part I Course Overview

Course Title

Computational Lexicography

Subject Code

LT - Linguistics and Translation

Course Number

3224

Academic Unit

Linguistics and Translation (LT)

College/School

College of Liberal Arts and Social Sciences (CH)

Course Duration

One Semester

Credit Units

3

Level

B1, B2, B3, B4 - Bachelor's Degree

Medium of Instruction

English

Medium of Assessment

English

Prerequisites

(i) LT2231 Introduction to Language Technology and (ii) LT2201 Introduction to Linguistics or LT2229 Fundamentals of Linguistics or LT2290 Introduction to Language Studies

Precursors

LT3233 Computational Linguistics

Equivalent Courses

CTL3224 Computational Lexicography

Exclusive Courses

Nil

Part II Course Details

Abstract

This course aims at introducing the theoretical and practical issues in dictionary making, with particular focus on the opportunities and benefits which computers have to offer in the process. The relation and interaction among lexicography, corpus linguistics and computational linguistics in dictionary compilation will be highlighted, especially with respect to the design and implementation of electronic dictionaries and lexical databases.

Course Intended Learning Outcomes (CILOs)

CILOs		Weighting (if app.)	DEC-A1	DEC-A2	DEC-A3
1	Critically compare the design, structure, and content of various kinds of monolingual and bilingual dictionaries and thesauri.		x	x	x
2	Describe the role of computers in compiling dictionaries for human use and machine use.		x	x	x
3	Discuss the issues in writing dictionary entries, and various sources and techniques for acquiring lexical information.		x	x	x
4	Apply the basic principles of database design to organise and store lexical information competently and creatively.		x	x	x
5	Plan a small lexicographic project innovatively, and implement it competently, applying the concepts and skills acquired from the course.		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.

Teaching and Learning Activities (TLAs)

TLAs	Brief Description	CILO No.	Hours/week (if applicable)
1	Lectures to explain the theoretical and practical issues in dictionary making, the use of computers and corpora in lexicography, and basic database design principles.	1, 2, 3, 4, 5	

2		Teacher-facilitated class/ group discussions on comparing the structures and contents of various types of dictionaries.	1, 3	
3		Class exercises on analyzing and using corpus data for definition writing and example selection.	2, 3	
4		Hands-on exercises to apply the basic database design principles covered in lectures for implementing lexical databases and solving other practical problems. Concepts in database design will be illustrated using Microsoft Access or other means as deemed appropriate by the instructor.	2, 4, 5	

Assessment Tasks / Activities (ATs)

	ATs	CILO No.	Weighting (%)	Remarks (e.g. Parameter for GenAI use)
1	Practical exercises and participation in class discussions.	1, 2, 3, 4	25	
2	Written report and class presentation for a group project on planning and implementing a selected type of dictionary	5	35	

Continuous Assessment (%)

60

Examination (%)

40

Examination Duration (Hours)

2

Assessment Rubrics (AR)**Assessment Task**

1. Practical exercises and participation

Criterion

Ability to engage meaningful in exercises

Excellent (A+, A, A-)

High

Good (B+, B, B-)

Significant

Fair (C+, C, C-)

Moderate

Marginal (D)

Basic

Failure (F)

Not even reaching marginal levels

Assessment Task

2. Written report and class presentation for a group project

Criterion

Ability to apply methods in a major area of computational lexicography

Excellent (A+, A, A-)

High

Good (B+, B, B-)

Significant

Fair (C+, C, C-)

Moderate

Marginal (D)

Basic

Failure (F)

Not even reaching marginal levels

Assessment Task

3. Examination

Criterion

Ability to demonstrate competence in theoretical and practical issues in computational lexicography

Excellent (A+, A, A-)

High

Good (B+, B, B-)

Significant

Fair (C+, C, C-)

Moderate

Marginal (D)

Basic

Failure (F)

Not even reaching marginal levels

Part III Other Information**Keyword Syllabus**

Monolingual and bilingual dictionaries, Thesauri, Lexical databases, Machine-readable dictionaries, Machine-usable dictionaries, Corpus-based lexicography, Dictionary project, Database design, Word meaning, Polysemy and sense distinction, Automatic lexical acquisition, Terminology

Reading List**Compulsory Readings**

Title	
1	Boguraev, B. and Briscoe, T. (Eds.) (1989) Computational Lexicography for Natural Language Processing. London: Longman.
2	Halliday, M.A.K., Teubert, W., Yallop, C. and #ermáková, A. (2004) Lexicology and Corpus Linguistics: An Introduction. London and New York: Continuum.

Additional Readings

Title	
1	Jackson, H. (2002) Lexicography: An Introduction. London and New York: Routledge.
2	Jackson, H. and Ze Amvela, E. (2000) Words, Meaning and Vocabulary: An Introduction to Modern English Lexicology. London and New York: Continuum.
3	Ooi, V.B.Y. (1998) Computer Corpus Lexicography. Edinburgh: Edinburgh University Press.
4	Sinclair, J. (Ed.) (1987) Looking Up: An Account of the COBUILD Project in Lexical Computing. London and Glasgow: Collins ELT.
5	Svensen, B. (1993) Practical Lexicography: Principles and Methods of Dictionary-Making. Oxford: Oxford University Press.
6	Roman, S. (2002) Access Database Design & Programming (3rd Edition). Sebastopol, CA: O' Reilly.
7	李明、周敬華 (2001) 《雙語詞典的編纂》，上海：上海外語教育出版社。
8	章宜華 (2002) 《語義學與詞典釋義》，上海：上海辭書出版社。
9	WordNet (http://wordnet.princeton.edu)
10	Various online dictionaries