

City University of Hong Kong
Course Syllabus

offered by Department of Linguistics and Translation
with effect from Semester B 2022/23

Part I Course Overview

Course Title: Computer-Aided Translation

Course Code: LT3354

Course Duration: One Semester

Credit Units: 3

Level: B3

Arts and Humanities

Proposed Area:
(for GE courses only)

Study of Societies, Social and Business Organisations

Science and Technology

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) CTL3354 Computer-Aided Translation

Exclusive Courses:
(Course Code and Title) Nil

Part II Course Details

1. Abstract

(A 150-word description about the course)

This course aims to provide students with basic training in computer-aided translation (CAT), helping them to acquire basic knowledge about machine translation (MT), basic principles and available technology for CAT, and most importantly hand-on experience of applying available MT systems and CAT tools to enhance translation productivity.

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.	Describe the brief history and basic concepts of MT and CAT, especially translation as an industry and MT systems and CAT tools as the machines.		✓	✓	✓
2.	Present the underlying philosophy and basic principles of CAT.		✓	✓	✓
3.	Present the current development of MT and CAT technologies.		✓	✓	✓
4.	Apply available MT systems and CAT tools to translation practice and discover whether/how they can improve translation productivity		✓	✓	✓

* If weighting is assigned to CILOs, they should add up to 100%.

[#] Please specify the alignment of CILOs to the Gateway Education Programme Intended Learning outcomes (PILOs) in Section A of Annex.

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. Teaching and Learning Activities (TLAs)

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

TLA	Brief Description	CILO No.						Hours/week (if applicable)
		1	2	3	4			
1	Lectures towards the above outcomes to explain and illustrate the basic issues involved, for a practical solution for each of them.	✓	✓	✓	✓			
2	Readings of lecture notes and selected chapters from textbooks and the user guides of available MT systems.	✓	✓	✓	✓			
3	Exercises and discussion to help students to resolve their problems involved in hands-on training and to explore features in CAT tools.	✓	✓	✓	✓			

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: 50 %								
2 assignments for the above tasks	✓	✓	✓	✓			25%	
Participation in class	✓	✓	✓	✓			5%	
Quiz	✓	✓	✓	✓			5%	
Presentation	✓	✓	✓	✓			15%	
Examination: 50% (duration: 2 hours)								
Two-hour examination on basic conceptions and know how about the MT/CAT systems in use. (CILO No. 1-4)								
* The weightings should add up to 100%.							100%	

5. Assessment Rubrics

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

Assessment Task	Criterion	Excellent (A+, A, A-)	Good (B+, B, B-)	Fair (C+, C, C-)	Marginal (D)	Failure (F)
1. 2 assignments	Ability to demonstrate understanding and to use MT and CAT tools	High	Significant	Moderate	Basic	Not even reaching marginal levels
2. Participation	Ability to engage in meaningful discussion and to complete exercises	High	Significant	Moderate	Basic	Not even reaching marginal levels
3. Quiz	Ability to demonstrate knowledge on theory and practice of MT and CAT	High	Significant	Moderate	Basic	Not even reaching marginal levels
4. Presentation	Ability to present and make arguments for the assigned topic	High	Significant	Moderate	Basic	Not even reaching marginal levels
5. Examination	Ability to demonstrate knowledge on theory and practice of MT and CAT	High	Significant	Moderate	Basic	Not even reaching marginal levels

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.)

Why MT, and then, why CAT?

MT history and MT paradigms, and problems in fully-automatic and high-quality translation (FAHQT).

What is translation, and how is it conducted by hand vs. by machine? Analysis of translation process and necessary tools, towards more productive man-machine cooperation: routine work for machine and creative work for human translators.

"Proper place" of MT: what "translator's amanuensis" do our translators really need?

Current development of MT and CAT: translation memory and example-based MT.

Human-machine interaction and supervised learning in MT and CAT, towards a fuller utilization of computer technology.

Basic training for hand-on experience of using available MT systems and CAT tools.

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.	Bowker, Lynne. 2002. <i>Computer-aided translation technology: a practical introduction</i> . Ottawa: University of Ottawa Press
2.	Nirenburg, S., H. Somers, and Y. Wilks. 2003. <i>Readings in Machine Translation</i> . Cambridge, Mass.: MIT Press

2.2 Additional Readings

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

1.	Hutchins, W. J. 2003. Machine translation: general overview. In R. Mitkov (Ed.) <i>The Oxford Handbook of Computational Linguistics</i> , pp.501-511. Oxford: University Press.
2.	Kay, M. (1980). The proper place of men and machines in language translation. Xerox PARC working paper, 1980. Reprinted in <i>Machine Translation</i> 12:3-23, 1997.
3.	Chan, Sin-wai (ed.) 2001. <i>Translation in Hong Kong: past, present and future</i> . Hong Kong: Chinese University Press
4.	Krings, Hans P. 2001. <i>Repairing texts: empirical investigations of machine translation post-editing processes</i> . Kent, Ohio: Kent State University Pres