

LT3354: COMPUTER-AIDED TRANSLATION

Effective Term

Semester B 2022/23

Part I Course Overview

Course Title

Computer-Aided Translation

Subject Code

LT - Linguistics and Translation

Course Number

3354

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

Nil

Precursors

Nil

Equivalent Courses

CTL3354 Computer-Aided Translation

Exclusive Courses

Nil

Part II Course Details

Abstract

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 hands-on experience of applying available MT systems and CAT tools to enhance translation productivity.

Course Intended Learning Outcomes (CILOs)

CILOs	Weighting (if app.)	DEC-A1	DEC-A2	DEC-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.	x	x	x
2	Present the underlying philosophy and basic principles of CAT.	x	x	x
3	Present the current development of MT and CAT technologies.	x	x	x
4	Apply available MT systems and CAT tools to translation practice and discover whether/how they can improve translation productivity	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 towards the above outcomes to explain and illustrate the basic issues involved, for a practical solution for each of them.	1, 2, 3, 4	
2	Readings of lecture notes and selected chapters from textbooks and the user guides of available MT systems.	1, 2, 3, 4	

3		Exercises and discussion to help students to resolve their problems involved in hands-on training and to explore features in CAT tools.	1, 2, 3, 4	
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Assessment Tasks / Activities (ATs)

ATs	CILO No.	Weighting (%)	Remarks (e.g. Parameter for GenAI use)
1	2 assignments for the above tasks	1, 2, 3, 4	25
2	Participation in class	1, 2, 3, 4	5
3	Quiz	1, 2, 3, 4	5
4	Presentation	1, 2, 3, 4	15

Continuous Assessment (%)

50

Examination (%)

50

Examination Duration (Hours)

2

Additional Information for ATs**Examination**

Two-hour examination on basic conceptions and know how about the MT/CAT systems in use.
(CILO No. 1-4)

Assessment Rubrics (AR)**Assessment Task**

1. 2 assignments

Criterion

Ability to demonstrate understanding and to use MT and CAT tools

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. Participation

Criterion

Ability to engage in meaningful discussion and to complete tutorial tasks

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. Quiz

Criterion

Ability to demonstrate knowledge on theory and practice of MT and CAT

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

4. Presentation

Criterion

Ability to present and make arguments for the assigned topic

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

5. Examination

Criterion

Ability to demonstrate knowledge on theory and practice of MT and CAT

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

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.

Reading List

Compulsory Readings

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

Additional Readings

Title	
1	Hutchins, W. J. 2003. Machine translation: general overview. In R. Mitkov (Ed.) The Oxford Handbook of Computational Linguistics, 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 Machine Translation 12:3-23, 1997.
3	Chan, Sin-wai (ed.) 2001. Translation in Hong Kong: past, present and future. Hong Kong: Chinese University Press
4	Krings, Hans P. 2001. Repairing texts: empirical investigations of machine translation post-editing processes. Kent, Ohio: Kent State University Pres