City University of Hong Kong

Information on a Course
offered by Department of Linguistics and Translation
with effect from Semester B in 2014 / 2015

Part I

Course Title:	Human-Machine Interactive Translation
Course Code:	LT5628
Course Duration:	1 semester
Credit Units:	3
Level:	P5
Medium of Instruction and Assessment:	English, supplemented by Chinese, in situations where English-Chinese translation is involved.
Prerequisites:	Nil
Precursors:	LT5603 Theory of Translation CTL5603 Theory of Translation LT5604 Translation Methodology CTL5604 Translation Methodology LT5411 Computational Linguistics CTL5411 Computational Linguistics
Equivalent Courses:	CTL5628 Human-Machine Interactive Translation
Exclusive Courses:	NIL

Part II

Course Aims

This course aims to study the general principles and advanced technologies of machine translation (MT) and computer(-aided) translation (CAT), with a focus on the aspect of human-machine interaction to enhance the productivity in the translation industry. Students will acquire a critical understanding of relevant concepts, methodologies and practical techniques of MT/CAT through hands-on training.

Making use of these concepts and techniques, they will be able to develop creative solutions to translation tasks and conduct high-quality and high-speed professional translation.

Course Intended Learning Outcomes (CILOs)
Upon successful completion of this course, students should be able to:

No.	CILOs	Weighting (if applicable)
1	Identify and apply the key concepts, principles and methodologies in human-machine interaction involved in the practical use of MT/CAT for professional translation.	
2	Apply the available technologies of MT/CAT for efficient and quality professional translation	
3	Formulate strategies for efficient and effective use of various MT/CAT tools for language resource development for productivity enhancement	
4	Evaluate MT/CAT systems and services by critiquing their translation quality and user-friendliness of facilities for human-machine interaction	

Teaching and Learning Activities (TLAs)
(Indicative of likely activities and tasks designed to facilitate students' achievement of the CILOs. Final details will be provided to students in their first week of attendance in this course)

CILO No.	TLAs	Hours/week (if applicable)
1-4	Lectures towards the above outcomes to explain and illustrate the basic issues involved, for a practical solution for each of them	2 hours/week
1-4	Readings of lecture notes and selected chapters from textbooks and the user guides of available MT systems	
1-4	Tutorials to help students to resolve their problems involved in hand-on training; Question-answering sessions, exercises and practical work, discussion of assignments	1 hour/week

Assessment Tasks/Activities
(Indicative of likely activities and tasks designed to assess how well the students achieve the CILOs. Final details will be provided to students in their first week of attendance in this course)

CILO No.	Type of Assessment Tasks/Activities	Weighting (if applicable)	Remarks
CILO 1-4	3-4 assignments on notions, principles and methodologies of MT/CAT and/or on translation practice using available MT/CAT system(s) (10% each); Participation in class (10%); Quizzes (optional) (10%);	50%	
CILO 1-4	Two-hour examination on basic conceptions and know how about the MT/CAT system(s) in use	50%	

Grading of Student Achievement: Refer to Grading of Courses in the Academic Regulations for Taught Postgraduate Degrees.

Grading pattern: Standard (A+, A, A-...F).

Grading is based on student performance in the assessment tasks/activities.

Letter Grade	Grading is based on student performance in the assessment tasks/activities
A+ A A-	**Tutorial/Classwork**: Strong evidence of original thinking; excellent ability to analyze and synthesize; superior grasp of subject matter; zealous participation **Assignments/Project**: Evidence of extensive knowledge in the field; excellent work applying relevant programming skills to implement selected computer-aided translation tools or components of such tools
B+ B B-	**Tutorial/Classwork**: Evidence of critical and analytical ability; good grasp of the subject; active participation **Assignments/Project**: Evidence of adequate knowledge in the field; good work applying relevant programming skills to implement selected computer-aided translation tools or components of such tools
C+ C C-	**Tutorial/classwork**: Evidence of satisfactory grasp of the subject; satisfactory participation **Assignments/Project**: Evidence of satisfactory knowledge in the field; satisfactory work applying relevant programming skills to implement selected computer-aided translation tools or components of such tools
D	**Tutorial/classwork**: Ability to follow the subject in spite of some difficulty; satisfactory participation **Assignments/Project**: Ability to apply knowledge in the field in spite of difficulty; barely adequate work applying relevant programming skills to implement selected computer-aided translation tools or components of such tools
F	**Tutorial/classwork**: Little or no evidence of familiarity with the subject matter; insufficient participation **Assignments/Project**: Very limited knowledge of subject matter and insufficient ability to apply relevant programming skills to implement selected computer-aided translation tools or components of such tools

Part III

Keyword Syllabus

1. Machine translation (MT) and Computer-aided translation (CAT) *vs.* fully-automatic and high-quality translation (FAHQT);
CAT vs. human-aided machine-translation (HAMT).
2. The "Proper place" of human and machine in translation industry: Routine work for machine and creative work for human;
Analysis of translation process and necessary tools, translation quality *vs.* productivity.
3. Basic principles and practices of human-machine interactions in translation industry.
4. Human-machine interaction for language resource development to enrich MT/CAT, towards a fuller utilization of language technologies.
5. Practical training for hands-on experience of using available MT system(s) and CAT tools for high-quality and high-speed professional translation.
6. Current development of MT/CAT technologies from the perspective of translation studies.

Recommended Reading

Text(s):
1. Bowker, Lynne. 2002. *Computer-aided Translation Technology: A practical introduction.* Ottawa: University of Ottawa Press
2. Chan, Sin-wai (ed.) 2001. *Translation in Hong Kong: past, present and future*. Hong Kong : Chinese University Press
3. Hutchins, W.J. 2000. *Early Years in Machine translation: Memoirs and biographies of pioneers*. Amsterdam: John Benjamins.
4. Hutchins, W. J. 2003. Machine translation: general overview. In R. Mitkov (Ed.) *The Oxford Handbook of Computational Linguistics,* pp.501-511. Oxford: University Press.
5. 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.
6. Krings, Hans P. 2001. *Repairing texts: empirical investigations of machine translation post-editing processes*. Kent, Ohio: Kent State University Press
7. Nagao, M. 1984. A framework of a mechanical translation between Japanese and English by analogy principle. In Elithorn, A., and R. Banerji (Eds.) *Artificial and*

Human Intelligence, pp. 173-180. Amsterdam: North-Holland.

8. Nirenburg, S., H. Somers, and Y. Wilks. 2003. *Readings in Machine Translation*. Cambridge, Mass.: MIT Press

9. Sager, Juan C. 1994. *Language engineering and translation: consequences of automation*. Amsterdam: Benjamins.

10. Somers, Harold (ed.) 2003. *Computers and Translation*. John Benjamins.

11. Trujillo, Arturo. 1999. *Translation Engines: Techniques for machine translation*. London: Springer

Online Resources

Nil