City University of Hong Kong Course Syllabus

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

Part I Course Overv	riew
Course Title:	Translation Technology
Course Code:	LT5620
Course Duration:	One Semester
Credit Units:	3
Level:	<u>P5</u>
Medium of Instruction:	English, supplemented by Chinese, in situations where English-Chinese translation is involved.
Medium of Assessment:	English, supplemented by Chinese, in situations where English-Chinese translation is involved.
Prerequisites: (Course Code and Title)	Pass departmental information technology (IT) proficiency test or Special approval by programme leader
Precursors: (Course Code and Title)	Nil
Equivalent Courses: (Course Code and Title)	CTL5620 Translation Technology
Exclusive Courses: (Course Code and Title)	Nil

Part II Course Details

1. Abstract

The aim of this course is to study and explore the roles of the enabling language information technologies that are employed in translation processes. In particular, topics will include computers and information technology, machine translation (MT) systems, linguistic knowledge and translation expertise in the automation of multilingual translation. The course will also present a survey of different types of machine translation systems and translation memory retrieval facilities that integrate the best of human and machine intelligence to maximize 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	(if currice applicable) learning (pleas		overy-enriched culum related ing outcomes se tick ✓ e appropriate)		
			AI	A2	A3	
1.	Describe the major milestones in the development of translation technology		√	√		
2.	Apply different kinds of translation tools to help with different translation tasks		✓	√	✓	
3.	Evaluate different types of translation technology in terms of translation quality		√	√	√	
4.	Explore and describe the recent trends of translation technology research and development		√	√		
	-	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.)

Final details will be provided to students in their first week of attendance in this course.

LTA	Brief Description		CILO No.				Hours/week
		1	2	3	4		(if applicable)
1	Lectures towards the above outcomes to explain and illustrate the major developments in translation technologies	✓	√	√	√		1 hour
2	Readings of lecture notes, selected papers and selected chapters from textbooks	✓	√	√	√		
3	Workshops to compare and contrast different translation technologies and services	✓	✓	√	√		1 hour
4	Tutorials to help students to resolve their learning problems and to demonstrate their achievements for the above tasks	✓	√	√	√		1 hour

4. Assessment Tasks/Activities (ATs)

(ATs are 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.

Assessment Tasks/Activities	CILO No.				Weighting	Remarks
	1	2	3	4		
Continuous Assessment: 50 %						
Written assignment and	✓	✓	✓	✓	50%	
oral presentation (optional)						
Quiz (optional)	✓	✓	✓	✓		
Examination: 50 % (duration: 21	nours)				
(CILO No. 1-4)						
		•	•		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	Good	Fair	Marginal	Failure
		(A+, A, A-)	(B+, B, B-)	(C+, C, C-)	(D)	(F)
Written assignment and oral presentation 2. Quiz	Knowledge, attitude, ability, creativity, accomplishment and performance in presenting and completing demons/assignments Marks	1.Excellent knowledge of major issues, key issues, basic concepts, ideas, principles and theories in translation technology.	1. Good knowledge of major issues, key issues, basic concepts, ideas, principles and theories in translation	1. Adequate knowledge of major issues, key issues, basic concepts, ideas, principles and theories in translation technology.	Basic familiarity with the subject matter. Marginal ability to apply basic linguistic, computing and programming knowledge to basic	Poor familiarity with the subject matter. Poor ability or fail to apply linguistic, computing and programming knowledge to basic tasks and
3. Examination		2. Excellent, creative application of linguistic knowledge to analysis of basic tasks and key issues in translation technology. 3. Very active participation and high performance.	technology. 2. Good application of linguistic, computing and programming knowledge to basic tasks and key issues in translation technology. 3. Active participation and good performance.	Fair application of linguistic, computing and programming knowledge to basic tasks and key issues in translation technology. Adequate participation and fair performance.	tasks and key issues in translation technology. 3. Marginal participation and marginal performance.	key issues in translation technology. 3. Poor participation and poor performance.

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

Assessment Task	Criterion	Excellent	Good	Marginal	Failure
		(A+, A, A-)	(B+, B)	(B-, C+, C)	(F)
Written assignment and oral presentation Quiz Examination	Knowledge, attitude, ability, creativity, accomplishment and performance in presenting and completing demons/assignments Marks	(A+, A, A-) 4. Excellent knowledge of major issues, key issues, basic concepts, ideas, principles and theories in translation technology. 5. Excellent, creative application of linguistic knowledge to analysis of basic tasks and key issues in translation technology. 6. Very active participation and high performance.	(B+, B) 1. Good knowledge of major issues, key issues, basic concepts, ideas, principles and theories in translation technology. 2. Good application of linguistic, computing and programming knowledge to basic tasks and key issues in translation technology. 3. Active participation and good performance.	(B-, C+, C) 4. Adequate basic knowledge of major issues, key issues, basic concepts, ideas, principles and theories in translation technology. 5. Fair or marginal application of linguistic, computing and programming knowledge to basic tasks and key issues in translation technology. 6. Adequate or marginal participation and fair performance. 7. Basic or marginal familiarity with the subject matter	 (F) 4. Poor familiarity with the subject matter. 5. Poor ability or fail to apply linguistic, computing and programming knowledge to basic tasks and key issues in translation technology. 6. Poor participation and poor performance.
				as a whole.	

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.)

- Survey of language processing technology underlying translation technology
- Historical review of translation technologies
- Major approaches to translation technologies
- Application of different types of translation technology for different translation tasks
- Evaluation of different types of translation technology
- Recent trends of research and development in translation technologies

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.	Lecture notes/slides for the course
2.	Selected papers/chapters on topics of translation technology
3.	Selected tutorials on key tasks of translation technology and system implementation/evaluation

2.2 Additional Readings

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

1.	Relevant chapters in the recommended reading list from online tutorials
2.	Advanced and related topics on translation technology and system implementation/evaluation

Recommended Reading Text(s)

- 1. Pushpak Bhattacharyya. 2015. Machine Translation. Boca Raton: Taylor & Francis.
- 2. Sharon O'Brian, Laura Winther Balling, and Michael Carl. 2014. *Post-editing of Machine Translation: Processes and applications*. Newcastle upon Tyne, England: Cambridge Scholars Publishing,
- 3. Chiew Kin Quah. 2006. *Translation and Technology*. Basingstoke, Hants.; New York: Palgrave Macmillan.
- 4. Sergei Nirenburg, Harold Somers, and Yorick Wilks. 2003. *Readings in Machine Translation*. Cambridge, Mass.: MIT Press
- 5. Lynne Bowker. 2002. *Computer-Aided Translation Technology: A Practical Introduction*. Ottawa: University of Ottawa press.
- 6. D., L. Balkan Arnold, R.L. Humphreys, S. Meijer and L. Sadler. 1994. *Machine Translation: An Introductory Guide*. Manchester and Oxford: NCC Blackwell.