Subject Description 科目簡介

Subject Code 科目編號	CHC5409
Subject Title 科目名稱	Chinese Studies and Generative AI: Opportunity, Challenge, and Ethics 中國研究與生成人工智能：機會、挑戰與道德
Credit Value 學分	3
Level 程度	5
Pre-requisite/ Co-requisite/ Exclusion	N/A
Objectives 科目宗旨	In the new millennium, the development of generative artificial intelligence (Gen AI) and its unprecedented impacts on human life have simultaneously brought about a great uncertainty about how human beings redefine themselves in relation to technological development. No matter whether the Gen AI-dominated world is a fantasy or an approaching reality, there has emerged profound curiosity, as well as deep anxiety and uncertainty about how human beings should conceptualize, redefine, or upgrade ourselves in a changing society of high technology and a fluctuating global order. The current academic and popular writings on artificial intelligence can be characterized as presenting a techno-pessimistic view that today's technological advances amplify social inequality rather than solving problems. Against such social background, this subject explores the applications of Gen AI in different subject fields of Chinese studies, focusing on the questions of opportunity, challenge and ethics that the high technology may bring to the field.
Intended Learning Outcomes 學習成果	Upon completion of the subject, students will be able to: a) demonstrate a critical thinking ability to understand the diversity of Chinese studies; b) grasp the knowledge about how artificial intelligence is used and represented in the various fields of Chinese studies; c) develop analytical thinking about how artificial intelligence brings pros and cons to different subdisciplines of Chinese studies; d) master the skills of applying artificial intelligence to different aspects of Chinese studies with ethical concerns; e) incorporate the above skills into their academic writing and career planning.

Subject Synopsis/ Indicative Syllabus

科目摘要/

教學大綱陳述

1. Introduction
2. History of Chinese AI and Gen AI: Past and Present
3. Gen AI in Chinese Studies: Past and Present
4. Gen AI and Education in China: Past, Present and Future
5. Human-Machine Relationship Through Time
6. What are Gen AI Ethics?
7. Guest Lecture 1: Gen AI in History
8. Guest Lecture 2: Gen AI in Literature or Film Studies
9. Guest Lecture 3: Gen AI in Art History or Visual Studies
10. Guest Lecture 4: Gen AI in Martial or Performing Arts
11. Guest Lecture 5: Gen AI in History of Science and Technology
12. Guest Lecture 6: Gen AI in Museum Practices
13. Student presentations

Teaching/Learning Methodology

教學方式

This class comprises two parts. Part I lays down the necessary historical, theoretical, and intellectual foundations for students to contemplate the implications that artificial intelligence has brought to human beings from the perspective of Chinese Studies. Part II gather a group of teaching staff and non-PolyU speakers who are specialized in different subdisciplines of Chinese Studies. Each of them will discuss in-depth of what the application of artificial intelligence means to their own fields with regard to the following three aspects—opportunity, challenge, and ethics.

This subject will be taught in Putonghua, although occasionally some guest lectures may be delivered in English. Students are expected to read the assigned readings (if any) before the classes. They should actively join the class discussions and activities during the lecture and tutorial times. Depending on the class arrangement, students are expected to deliver oral presentation on designated subjects. Altogether, students are expected to submit a short written assignment and a final paper that contain 8,000 Chinese characters altogether.

Assessment Methods in Alignment with Intended Learning Outcomes

考核方式

(與學習成果相呼應)

Specific assessment methods/tasks	% weighting	Intended subject learning outcomes to be assessed (Please tick as appropriate)					
		a	b	c	d	e	
1. In-Class Assessment	20	V	V	V	V	V	
2. Oral presentation	20	V	V	V	V	V	
3. Short written assignment (e.g. review or proposal)	10	V	V	V	V	V	
4. Final paper	50	V	V	V	V	V	
Total	100 %						

	Explanation of the appropriateness of the assessment methods in assessing the intended learning outcomes: 1. An in-class assessment will be based on the students' participation, including active response to the instructor's questions, contribution to the class discussion, and enthusiastic engagement with the six invited lectures during the Q&A sessions. The evaluation will also be contingent upon the quality of the students' responses. 2. An oral presentation will test the students' ability to find materials independently and their skills of articulating their thoughts and analyzing the materials. 3. A short written assignment will test the students' ability to incorporate what they learn from the class and their analytical skills into written or other presentable formats. 4. For final paper, students are expected to choose one specific topic from the six areas (as represented by six guest lectures), followed by consulting with the instructor before completing it. The guest lecture provides foundational knowledge for them to understand the field, but the students need to do more academic research and supplement their final projects with more relevant studies. In terms of format, papers must be double-spaced with 12-point type and 1inch margins and formatted for letter-size (8.5 x 11 in.) paper if possible. Their paper needs to be a subject from the course while engaging relevant critical issues. The paper must be word-processed, double-spaced, page-numbered, and proofread. It should have normal margins and a readable font. The quotation style follows Chicago Manual of style. Students should always back up their argument with evidence from the texts through judicious use of quotations and paraphrases (keep plot summaries to a minimum and avoid lengthy quotations). They are expected to make use of the scholarly texts from the course to the best of their ability. In addition, students should include 2-3 scholarly articles to support their analyses and arguments.	
Student Study Effort Expected **學生學習時數**	Class contact:	
	▪ lectures	26 Hrs.
	▪ tutorials	13 Hrs.
	Other student study effort:	
	▪ Readings	48 Hrs.
	▪ Written reports	33 Hrs.
	Total student study effort	120 Hrs.

Reading List and References **參考書目**	"Ethics in Generative AI," July 23, 2023. https://www.datacamp.com/tutorial/ethics-in-generative-ai Bratton, Benjamin H., Anna Greenspan and Bogna Konior, eds. *Machine Decision Is Not Final: China and the History and Future of Artificial Intelligence.* United Kingdom: Urbanomic, 2024. Brokaw, Cynthia, and Christopher A. Reed, eds. *From Woodblocks to the Internet: Chinese Publishing and Print Culture in Transition, Circa 1800 to 2008*. Leiden: Brill, 2010. Diebel-Fischer, H. "Research Ethics in the Digital Age: Fundamentals and Problems." In *Research Ethics in the Digital Age: Ethics for the Social Sciences and Humanities in Times of Mediatization and Digitization*, edited by Dobrick, F. M., Fischer, J. and Hagen, L. M., 7-21. Wiesbaden: Springer VS, 2018. Floridi, Luciano. *The Ethics of Artificial Intelligence: Principles, Challenges, and Opportunities*. Oxford: Oxford University Press, 2023. Jan Krikke, "China's Ancient Worldview Shines Light on Future of AI," *Asian Times*, February 5, 2018, https://asiatimes.com/2018/02/chinas-ancient-world-view-shines-light-future-ai/ Knox, Jeremy. *AI and Education in China: Imagining the Future, Excavating the Past.* United Kingdom: Routledge, 2023. Stenmark, C. K., and Winn, N. A. "Ethics in the Humanities," In *Handbook of Academic Integrity*, edited by Bretag, Tracey. 1–14. Singapore: Springer, 2016. Tsu, Jing, and Benjamin Elman, eds. *Science and Technology in Modern China, 1880s–1940s*. Leiden: Brill, 2014. 王兆鵬，《唐詩排行榜》，北京：中華書局，2011 年。 邱偉云，〈驗證、修正、創新：數字史學方法的三重功能〉，《南京大學學報(哲學.人文科學.社會科學)》2019,56(2)，頁 87-90。 孫輝，〈認知科學視角下對數字史學的透視〉，《文獻與數據學報》，第 2 卷第 1 期，2020 年 3 月，頁 57-67。 徐力恆，〈華文學界的數位人文探索：一種「史前史」的觀察角度〉，《中國文哲研究通訊》，2020 年，頁 107-127。 徐永明，《中國古典文學研究的幾種可視化途徑——以湯顯祖研究為例》，《浙江大學學報》（人文社會科學版） 2018 年第 2 期，頁 164-174 。 馬昭儀、何捷、劉帥帥，〈中國古典敘事文學的時空敘事數位模型研究——以〈李娃傳〉為例〉，《地球信息科學學報》2020 年第 5 期，頁 967-977。 張維玲，〈數位人文與歷史研究的一點反思〉，待刊。 梁晨、李中清，〈從微觀數據到宏觀歷史：作為橋樑的數字史學〉，《中國社會科學評價》2021 年第 2 期，84–92。 陳大康，〈從數理語言學看后四十回的作者〉，《紅樓夢學刊》1987 年第 1 輯，頁 293-318。

	揚・克里克，〈前往人工智慧的未來，先回到中國的歷史〉，《觀察者》，2018 年 2 月 21 日。 https://www.guancha.cn/JanKrikke/2018_02_21_447504.shtml 馮象，“我是阿爾法：論人機倫理，”《新國際》， https://www.newinternationalism.net/?p=6966 趙薇，〈數字時代人文學研究的變革與超越：數位人文在中國〉，《探索與爭鳴》2021 年第 6 期（2021 年 7 月），頁 191-206。 趙薇，〈社會網絡分析與“大波三部曲”的人物功能〉，《山東社會科學》2018 年第 9 期，頁 50-64。 石侃、蘇超、盧昱波。〈人工智慧（AI）：博物館未來發展的必要工具〉。《科技博物》，2019 年第 23.1 期，頁 29-41。 https://www.airitilibrary.com/Article/Detail?DocID=16841220-201903-201904010016-201904010016-29-41
Medium of Instruction **授課語言**	Chinese (Putonghua) 中文 (普通話)