THE CHINESE UNIVERSITY OF HONG KONG

Use of Artificial Intelligence Tools in Teaching, Learning and Assessments

A Guide for Students

Preamble

- 1. Artificial intelligence (AI), generative AI in particular, is sweeping the globe and revolutionizing the way we teach and learn. While AI tools have the potential to improve both teaching and learning experiences, these tools should be approached critically with a full recognition of their strengths and limitations. It would be crucial to understand how AI tools can be incorporated into teaching and learning in an open and transparent manner to attain the desired learning outcomes.
- 2. The University has prepared the *Guidelines on the Use of Artificial Intelligence Tools in Teaching, Learning and Assessments* ("Guidelines") to (i) set out the general directions on the use and application of AI tools in teaching and learning with a view to upholding the principles of academic honesty and integrity and enhancing the quality of teaching and learning; (ii) articulate four approaches to the use of AI tools in student learning activities and assessments; (iii) reiterate that improper or unauthorized use of AI tools will constitute acts of academic dishonesty which will be handled in accordance with the University's *Procedures for Handling Cases of Academic Dishonesty*; and (iv) provide guidance to teachers regarding their use of AI tools in teaching, grading and provision of feedback on student work.
- 3. Students should take note of the following salient points extracted from the Guidelines and follow strictly the instruction and/or permission given by teachers in the course outline or learning activity/assessment guide regarding the use of AI tools in teaching, learning and assessments. The Guidelines will be reviewed and updated to reflect changes in technology, best practices, and other relevant developments as and when necessary. The second version of the Guidelines dated May 2025 supersedes the first version issued in March 2023.
- 4. For teaching, learning and assessments involving research (e.g. capstone courses, final year projects, research proposals and theses), reference should also be made to the *Guidelines on the Responsible Use of AI for Research*, as appropriate.

Definitions

- 5. Below are the definitions of some terminologies used in the Guidelines:
 - (a) **AI** is the branch of computer science dedicated to developing systems or machines capable of performing tasks that typically require human intelligence such as learning, reasoning, problem-solving, understanding natural language, and perception. AI systems can either be rule-based or use machine learning to adapt and enhance their performance over time.

- Predictive AI involves using statistical analysis and machine learning to identify patterns, anticipate behaviors and forecast upcoming events. It is used to predict potential future outcomes, causation, risk exposure and more¹. For example, VeriGuide is a kind of predictive AI.
- Generative AI refers to a type of AI that creates new content, such as text, images, music, or videos, based on patterns and data that are used to train models known as deep neural networks. For example, ChatGPT is a kind of generative AI.
- (b) AI tools, in the context of the Guidelines, include
 - those selected and adopted by the University central, e.g. Information and Technology Services Centre (ITSC) *(see <u>AI Hub@CUHK</u>)*;
 - those selected and adopted through collaboration between ITSC and individual units/teachers; and
 - those selected and adopted by individual units, teachers and/or students.

Ethical Principles

AI is a double-edged sword. Users should use but not abuse it. They should use it as a research tool and not as a cheating device. Most importantly, users should use AI to think *with* them, and not *for* them. The following principles should be observed for ensuring ethical and authorized use of AI tools:

- 6. Accountability: Users of AI tools are accountable for the AI-generated results included in their work. Hence, users should carefully evaluate the implications of using AI tools for teaching, learning and assessments before adopting such tools. Users should factcheck all outputs of AI tools by cross-checking the claims against reliable sources, as some current models of AI tools may confidently reassert factual errors. Users of these tools will be responsible for any errors or omissions.
- 7. **Transparency**: Users should be ready to disclose information on their use of AI tools and the process behind generating the results, and explain how outcomes can facilitate their teaching, learning and assessments.
- 8. **Communication**: The adoption of AI tools should be clearly communicated among stakeholders, for example, between teachers and students; among teachers, course coordinators, Assessment Panel, Department Board and Faculty Board, as appropriate.
- 9. Accessibility of AI tools in a fair manner: AI tools should be made accessible to students in a fair manner.
- 10. **Data privacy and confidentiality**: Sharing data with AI tools may lead to exposing work to the public without permission. Attention should be paid to data privacy and confidentiality. Caution should be exercised not to misuse or infringe the intellectual property of others.
- 11. Acknowledgement: Like any other tools and references, permitted use of AI tools should be acknowledged unless otherwise specified. Specific and detailed information on the

¹ Source: <u>https://www.ibm.com/think/topics/predictive-ai.</u>

AI tools used, including prompts used (if applicable) for completing the assignments, learning activities and/or assessments, should be provided in the work concerned. If deemed appropriate, the output of generative AI should be included as an appendix of the work submitted by students.

Use of AI Tools by Students in Learning Activities and Assessments

Four Approaches

12. Each course will adopt an approach on the use of AI tools in students' learning activities and/or assessments taking into consideration the disciplinary needs, learning outcomes, pedagogical approach and design, and assessment means/schemes.

Approach 1 – Prohibit all use of AI tools

Students are <u>not</u> allowed to use any AI tools in any kind of learning activity or assessment that will be counted towards students' final grade of the course, or used for evaluating students' attainment of the desired learning outcomes. Students are expected to produce their own work independently without any collaboration or use of AI tools. Such information will be spelt out clearly in the course outline or learning activity/assessment guide.

Approach 2 – Use only with prior permission

Students are allowed to use AI tools in some scenarios or some learning activities and/or assessments but not in others. Teachers will clearly inform students which AI tools students are allowed to use, and when and how they can and cannot use these tools. For instance, use of an AI tool for checking grammar may not be allowed in a course with a learning outcome related to students' writing skills. Teachers will also make clear the rationale for allowing these tools in some situations but not allowing them in others, and how these tools ought to be cited or otherwise acknowledged. Such information will be spelt out clearly in the course outline or learning activity/assessment guide. Teachers will also help students understand the appropriate uses of these tools and the limits of such usage.

Approach 3 – Use only with explicit acknowledgement

Students are allowed to use AI tools in any learning activities and/or assessments as long as they explicitly cite or otherwise acknowledge the use of these tools. Details on which AI tools are allowed to use, how these tools ought to be cited or otherwise acknowledged will be spelt out clearly in the course outline or learning activity/assessment guide. Teachers will also help students understand the appropriate uses of these tools and the limits of such usage.

Approach 4 – Use is freely permitted without acknowledgement

Students are allowed to use AI tools in learning activities and/or assessments without being required to explicitly cite or otherwise acknowledge the use of these tools, for example, in courses where students are allowed or expected to frequently collaborate with or use AI tools. Details on which AI tools are to be used will be spelt out clearly in the

course outline or learning activity/assessment guide. Teachers will also help students understand the appropriate uses of these tools and the limits of such usage.

13. Teachers will clearly and explicitly inform students which approach they will adopt in their courses and provide clear and detailed instructions in the course outline or learning activity/assessment guide. It is the responsibility of students to study the course outline and/or learning activity/assessment guide of individual assignments in detail to ensure that they follow the instruction and permission strictly and seek clarification from the course teacher if in doubt. Improper/unauthorized use of AI tools in learning activities and assessments will constitute acts of academic dishonesty which will be handled in accordance with the University's *Procedures for Handling Cases of Academic Dishonesty (see paragraphs 17 – 21)*.

AI Readiness, Literacy and Competency

14. Teachers will take into consideration students'AI readiness when they allow students to use AI tools in learning activities and/or assessments. AI literacy² is crucial for students to understand the capabilities and limitations of AI tools, as well as the potential consequences of using them. Students should have attained a minimum level of critical AI literacy before using AI tools in learning activities and/or assessment and recognize the deficiencies of such tools. A possible way of enhancing AI literacy is to critique the outputs generated by AI models. Students should reflect on how well they can identify the deficiencies of AI tools in terms of logic, consistency, accuracy and bias, and whether they can detect fabrications, misrepresentations and fallacies. In addition, the quality of output when one uses an AI tool depends to a large extent on the instructions given to the tool. Students should enhance their AI competency and acquire skills to master "prompt engineering" by refining their prompts in order to obtain good outcomes.

Use of AI Tools by Teachers in Teaching, Grading and Provision of Feedback on Student Work

15. Teachers may use AI tools to assist their teaching taking into consideration factors such as disciplinary needs, learning outcomes, pedagogical approach and design, irrespective of the approach to the use of AI tools adopted for student learning activities and/or assessments on individual courses. Whenever teachers use AI tools to assist them to grade and/or provide feedback on student work, students will be informed in advance. Trusted AI tools will be used in the process to avoid data breaches and privacy violations.

Overall Monitoring of the Use of AI Tools in Courses

16. The adoption of permitted use of AI tools in courses is subject to regular course review by the teacher(s) concerned and the programme committee. Department Board and Faculty Board are expected to review the efficacy of the AI tools adopted, if any, in

² "AI literacy for a typical individual is the ability to comprehend, interact with, and make informed decisions regarding artificial intelligence technologies in daily life. It involves understanding the basic principles of AI, recognizing its applications, and being aware of ethical, social, and privacy implications while responsibly engaging with AI systems" according to Chan, C. K. Y. & Colloton, T. (2024). *Generative AI in Higher Education: A ChatGPT Effect.* Routledge.

achieving the desired learning outcomes. This set of Guidelines stipulates the minimum requirements of the University. Department Board and Faculty Board may formulate discipline-specific guidelines and policies so as to optimize the benefits of using AI tools in attaining the desired learning outcomes.

Improper/Unauthorized Use of AI Tools

- 17. Students using AI tools in their learning activities and/or assessments without complying with the Guidelines and requirements for such use will result in improper or unauthorized use. Such an act will constitute a **serious violation of academic dishonesty**.
- 18. The University's proprietary text similarity detection system, VeriGuide, has been used to help the University to ensure that works submitted by students as part of course requirements are original, and that students receive proper recognition and grades for their original work. Students, in submitting their work to the VeriGuide, warrant in the declaration statement that they are the lawful owner of the copyright of the work, which is their original work except for the source materials explicitly acknowledged, and that they have complied with the instructions given by the course teacher(s) regarding the use of AI tools for the work.
- 19. If a suspected case of improper/unauthorized use of AI tools is identified, the student concerned may be required by the teacher to explain his/her assignment/task and answer questions with a view to finding out whether the work submitted is the student's own work.
- 20. If the use of AI tools is not permitted on an assignment, learning activity and/or assessment, and a student is found to have used such tools in his/her work, the case will be handled in accordance with the University's *Procedures for Handling Cases of Academic Dishonesty*. Improper/unauthorized use of AI tools is regarded as academic dishonesty and is subject to the categories of offence (and corresponding penalties) as specified in the *Procedures*, e.g. "plagiarism", "employing or using services provided by a third party", and "all other acts of academic dishonesty" as deemed appropriate by the relevant disciplinary committees.
- 21. Penalties for offences of academic dishonesty may include reviewable/permanent demerit(s), failure grade for the course concerned, suspension from the University, lowering the degree classification, and termination of studies at the University. For cases of offences committed by a former student while studying for the award in question, which come to light after the student's graduation, this may also constitute a good cause under which the University may revoke his/her academic award in accordance with the University's procedure for revoking an academic award.

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