The Hong Kong University of Science and Technology

UG Course Syllabus (Fall 2025-26)

[Course Title] Artificial Intelligence Ethics

[Course Code] COMP 1944

[No. of Credits] 3-credit

[Any pre-/co-requisites] N/A

Name: XIAO Huiru

Email: huiruxiao@cse.ust.hk

Course Description

Artificial intelligence (AI) is disrupting every sphere of our work and lives, bringing unprecedented risks to society. This introductory course surveys the explosive area of AI ethics, illuminating relevant AI concepts with no prior background needed. Fake news bots. AI driven social media displacing traditional journalism. Drone warfare. Elimination of traditional jobs. Privacy-violating advertising. Monopolistic network effects. Biased AI decision/recognition algorithms. Deepfakes. Autonomous vehicles. Automated hedge fund trading. No area remains untouched. Policy think tanks, governments, and tech companies around the world have started paying serious attention to AI ethics. How will human civilization survive the rise of AI? What are the new rules? What are the ethical frameworks needed to avoid extinction? What are engineers' and entrepreneurs' ethical responsibilities?

Intended Learning Outcomes (ILOs)

By the end of this course, students should be able to:

1. Acquire a comprehensive understanding of AI ethical considerations and social implications;
2. Develop your own perspectives on the foundational ethical questions surrounding emerging technologies;
3. Critically analyze impacts and societal challenges of AI;
4. Apply your knowledge to real-world AI-related issues and propose solutions;
5. Enhance written and oral communication skills to effectively discuss ideas related to AI ethics.

Assessment and Grading

This course will be assessed using criterion-referencing and grades will not be assigned using a curve. Detailed rubrics for each assignment are provided below, outlining the criteria used for evaluation.

Assessment Task	Contribution to Overall Course grade (%)
Participation	20%
Midterm exam	20%
Quizzes	10%
AI news presentation (Individual)	5%
Reading response (Individual)	15%
Debate (Group)	15%
Debate review (Individual)	15%

Assessments:

[List specific assessed tasks, exams, quizzes, their weightage, and due dates; perhaps, add a summary table as below, to precede the details for each assessment.]

Assessment Task	Contribution to Overall Course grade (%)	Due date
Midterm exam	20%	Around mid-October *
Quizzes (4 quizzes in total)	10%	To be held in class *
Reading response (Individual)	15%	Around early-November *
Debate review (Individual)	15%	Around early-December *
Participation	20%	To be held in class *
AI news presentation (Individual)	5%	To be held in class *
Debate (Group)	15%	To be held in class *

* Assessment marks for individual assessed tasks will be released within two weeks of the due date.

Assessments:

Assessment Task	Contribution to Overall Course grade (%)
Participation	20%
Midterm exam	20%
Quizzes	10%
AI news presentation (Individual)	5%
Reading response (Individual)	15%
Debate (Group)	15%
Debate review (Individual)	15%

Mapping of Course ILOs to Assessment Tasks

[add to/delete table as appropriate]

Assessed Task	Mapped ILOs	Explanation
Participation	ILO3, ILO4, ILO5	Lecture attendance and high level of engagement are expected to achieve analysis conduction on real-world AI-related issues, and oral communication skills enhancement.
Midterm exam	ILO1, ILO2, ILO3, ILO4, ILO5	In-class, closed-book, closed-notes midterm exam to assess students' overall abilities.
Quizzes	ILO1, ILO2, ILO3	In-class, open-book quizzes to assess understandings of the reading materials on AI ethics, perspectives development on ethical questions, and critical thinking analysis.
AI news presentation	ILO2, ILO3, ILO4	Each student is tasked with preparing a succinct presentation (3 minutes) focused on a significant AI news event from the previous two weeks.
Debate	ILO1, ILO2, ILO3, ILO4, ILO5	Each student will be assigned to one group (around 5 persons each group).

		Each group will join one debate on some AI-related controversial topics (two groups each debate).
Reading Response	ILO1, ILO2, ILO5	Every week, a list of readings will be provided as part of the course materials, some of which will be selected as the reading response pool. Students are expected to choose one piece from the presented options and compose a critical response essay.
Debate review	ILO1, ILO3, ILO5	Students will write a debate review about any final debate that they are not as a debater. In the debate review, students will briefly summarize the debate contents of both sides, reflect attitudes and thoughts during the debate process, present deeper thinking and insights on the debate topic.

Grading Rubrics

[Detailed rubrics for each assignment will be provided in canvas. These rubrics clearly outline the criteria used for evaluation. Students can refer to these rubrics to understand how their work will be assessed.]

Final Grade Descriptors:

[As appropriate to the course and aligned with university standards]

Grades	Short Description	Elaboration on subject grading description
A	Excellent Performance	Demonstrates a comprehensive grasp of subject matter, expertise in problem-solving, and significant creativity in thinking. Exhibits a high capacity for scholarship and collaboration, going beyond core requirements to achieve learning goals.
B	Good Performance	Shows good knowledge and understanding of the main subject matter, competence in problem-solving, and the ability to analyze and evaluate issues. Displays high motivation to learn and the ability to work effectively with others.
C	Satisfactory Performance	Possesses adequate knowledge of core subject matter, competence in dealing with familiar problems, and some capacity for analysis and critical thinking. Shows persistence and effort to achieve broadly defined learning goals.
D	Marginal Pass	Has threshold knowledge of core subject matter, potential to achieve key professional skills, and the ability to make basic judgments. Benefits from the course and has the potential to develop in the discipline.
F	Fail	Demonstrates insufficient understanding of the subject matter and lacks the necessary problem-solving skills. Shows limited ability to think critically or analytically and exhibits minimal effort towards achieving learning goals. Does not meet the threshold

		requirements for professional practice or development in the discipline.

Course AI Policy

[State the course policy on the use of generative artificial intelligence tools to complete assessment tasks.]

Students are not allowed to use generative AI (such as ChatGPT) to directly produce any content of assignments. This will be treated as plagiarism. Students might use generative AI as they would use a human collaborator (e.g., to aid in searching for information). Any interactions with these tools must be credited in assignments.

Communication and Feedback

Assessment marks for individual assessed tasks will be communicated via Canvas within two weeks of submission. Feedback on assignments will include scores and detailed comments, such as merits & weaknesses, improvement suggestions. Students who have further questions about the feedback including marks should consult the instructor within five working days after the feedback is received.

Resubmission Policy

[If applicable, explain the policy for resubmitting work or reassessment opportunities, including conditions and deadlines.]

No late submission or resubmission will be accepted unless accompanied by prior arrangement with reasonable situations and supporting documents.

Required Texts and Materials

Reference books (all available in HKUST library online resources or book collections):

- Virginia Dignum. Responsible Artificial Intelligence: How to Develop and Use AI in a Responsible Way. Springer, 2019.
- Mark Cockelbergh. AI Ethics. MIT Press, 2020.
- Edited by Markus D. Dubber, Frank Pasquale, and Sunit Das. The Oxford Handbook of Ethics of AI. Oxford University Press, 2020.
- Virginia Eubanks. Automating Inequality: How High-tech Tools Profile, Police, and Punish the Poor. St. Martin's Press, 2018.
- Cathy O'Neil. Weapons of Math Destruction: How Big Data Increases Inequality and Threatens Democracy. Crown, 2016.

Academic Integrity

Students are expected to adhere to the university's academic integrity policy. Students are expected to uphold HKUST's Academic Honor Code and to maintain the highest standards of academic integrity. The University has zero tolerance of academic misconduct. Please refer to Academic Integrity | HKUST – Academic Registry for the University's definition of plagiarism and ways to avoid cheating and plagiarism.

Additional Resources

Every week, a list of readings will be provided and released in canvas as additional resources.