

## SOSC 3800 / PPOL 3800: ETHICS, EMERGING TECHNOLOGIES AND PUBLIC POLICY

Tuesdays & Thursdays, 16:30 – 17:50, Room 4503 (lifts 25-26)

Instructor	Teaching Assistants
Prof. James K. WONG ( <a href="mailto:jameskalei@ust.hk">jameskalei@ust.hk</a> ) Room 3370 (lifts 13-15), Academic Building Office hours: By e-mail appointment	Ms. Creamy WONG ( <a href="mailto:w yukha@ust.hk">w yukha@ust.hk</a> ) Miss Heliana LEE ( <a href="mailto:heliana lee@ust.hk">heliana lee@ust.hk</a> )

### Course Description

This course studies the ethical dimensions of emerging technologies and public policy. The overarching theme is to explore the moral debate surrounding some pressing policy issues in emerging technologies nowadays. The first part of the course introduces the essential moral concepts and theories for general reasoning in ethics and public policy. The second part of the course discusses a selection of disputed policy issues in emerging technologies through the application of moral concepts and theories. By the end of the course, students will benefit with the knowledge and skills necessary for policy argumentation from the perspective of ethics.

### Intended Learning Outcomes

By the end of this course, students will be better equipped to:

1. Knowledge: (a) Discuss the key concepts and theories in the study of ethics; and (b) analyze and evaluate moral arguments surrounding policy debate in emerging technologies.
2. Skills: (a) Apply concepts and theories in policy argumentation; and (b) construct, criticize and defend arguments.
3. Attitude: Exercise independent and critical judgments in ethics, emerging technologies and public policy.

### Class Schedule

TUESDAYS		THURSDAYS	
Class/Date	Topic	Class/Date	Topic
1 / Feb 7	Introduction	2 / Feb 9	Moral Reasoning and Public Policy
3 / Feb 14	Reasoning with Consequences (1)	4 / Feb 16	Reasoning with Consequences (2)
5 / Feb 21	Reasoning with Consequences (3)	6 / Feb 23	Case Development: A Primer
7 / Feb 28	Reasoning with Obligations (1)	8 / Mar 2	Reasoning with Obligations (2)
9 / Mar 7	Reasoning with Obligations (3)	10 / Mar 9	Reasoning with Obligations (4)
11 / Mar 14	Reasoning with Virtues and Vices (1)	12 / Mar 16	Reasoning with Virtues and Vices (2)
13 / Mar 21	Mid-term Review	14 / Mar 23	Case Analysis and Policy Argumentation: A Primer
15 / Mar 28	[Class A] Case Study (1): Xenobot	16 / Mar 30	[Class B] Case Study (1): Xenobot
17 / Apr 4	[Class A] Case Study (2): Telemedicine		
		18 / Apr 13	[Class B] Case Study (2): Telemedicine
19 / Apr 18	[Class A] Case Study (3): Cryptocurrency	20 / Apr 20	[Class B] Case Study (3): Cryptocurrency
21 / Apr 25	[Class A] Case Study (4): Autonomous Vehicles	22 / Apr 27	[Class B] Case Study (4): Autonomous Vehicles
23 / May 2	Case Analysis and Policy Argumentation: Presentations (1)	24 / May 4	Case Analysis and Policy Argumentation: Presentations (2)
25 / May 9	Final Review		

*Note: Class schedule and topics may be adjusted to facilitate students' learning. For Classes 15 to 22, students will be divided into Class A and Class B, and they should attend the classes as assigned.*

## Assessment and Grading

Deliverable / Weighting		Requirements
<p><b>Video Case Development (group-based)</b></p> <p><i>To help students develop policy cases on emerging technologies involving ethical controversies, which will be analyzed by their peers. This aligns with ILOs #1(a), #2(a), #3(a) and #3(b).</i></p>	10%	<ul style="list-style-type: none"> <li>Students will identify ONE policy issue on emerging technologies with ethical controversies taking place in any parts of the world. They will develop a detailed narrative featuring the essential elements of a case, i.e., relevant plots and characters.</li> <li>Students will prepare a video case in <b><u>no more than 10 minutes</u></b>. They will share the video case to their peers for the verbal case analysis.</li> <li>The video case should be submitted by <b>23:59, Mar 26 (Sun)</b>.</li> <li>All video cases will be assessed based on content, organization, and style.</li> </ul>
<p><b>Case Analysis and Policy Argumentation (group-based)</b></p> <p><i>To help students consolidate the knowledge of ethical perspectives through analyzing a case of their peers and making policy argumentation, which aligns with ILOs #1(a), #1(b), #2(a), #2(b), #3(a) and #3(b).</i></p>	20%	<ul style="list-style-type: none"> <li>Students will formulate and present an analysis of a peer group's video case as assigned based on one or more ethical perspectives.</li> <li>They will deliver a verbal presentation of the case analysis in about <b><u>10 minutes</u></b> on <b>May 2 (Tue)</b> or <b>May 4 (Thu)</b>.</li> <li>All verbal case analyses will be assessed based on content, organization, and style.</li> </ul>
<p><b>Classwork (group-based)</b></p> <p><i>To help students map ethical debates in some selected case studies on emerging technologies and public policy based on various ethical perspectives, which aligns with ILOs #1(a), #1(b), #2(a), #2(b), #3(a) and #3(b).</i></p>	10%	<ul style="list-style-type: none"> <li>During each face-to-face session from Classes 15 to 22, students will complete a group task. They will report verbally the deliverables and respond to questions from other participants in class.</li> <li>All group tasks will be assessed based on content only.</li> </ul>
<p><b>Final Take-home Essays</b></p> <p><i>To enable students to describe, explain and apply the key lessons learnt from classes and readings, which aligns with ILOs #1(a), #1(b), #2(a), #2(b), #3(a) and #3(b).</i></p>	40%	<ul style="list-style-type: none"> <li>This is an open-book assignment. Students will answer, <b><u>in 6 days</u></b>, TWO of the prescribed essay questions. The answer to EACH question should be <b><u>around 800-1,000 words</u></b>, excluding endnotes and appendices.</li> <li>The questions will be released by <b>18:00, May 9 (Tue)</b>. Students should submit the answers by <b>23:59, May 15 (Mon)</b>.</li> <li>All essay answers will be assessed based on content, organization, and style.</li> </ul>
<p><b>Quizzes × 2</b></p> <p><i>To help students consolidate the key lessons learnt from classes and readings, which aligns with ILOs #1(a) and #1(b).</i></p>	20%	<ul style="list-style-type: none"> <li>Both are open-book assessments. Each quiz contains tasks such as MC, true or false, and/or short questions. For each quiz, the syllabus includes all materials already discussed.</li> <li>Students will complete each quiz in <b><u>30 minutes</u></b>.</li> <li>Quiz 1 will take place on <b>Mar 21 (Tue)</b> and Quiz 2 on <b>May 9 (Tue)</b>.</li> <li>No 'make-up' quizzes will be arranged except for medical or family emergencies. The format of the 'make-up' quizzes may be different.</li> </ul>

\* **Attendance and Participation Bonus:** A maximum of 5 points will be awarded to students who contribute actively to class discussions. Attendance will be taken on an ad hoc basis.

\*\* **Penalty:** For late submission, no submission or no show, mark penalty will apply. For confirmed cases of plagiarism, severe sanctions will be imposed.

\*\*\* **Prevention of Free riding:** Each group should attach detailed division of labor for all group assignments. The grade of each individual student may be adjusted based on the division and quality of labor.

### Important Dates

Date / Time	Task	Date / Time	Task
Feb 20 / 23:59	Grouping Confirmation	May 2 & 4 / in class	Case Analysis and Policy Argumentation: Presentations
Mar 21 / in class	Quiz 1	May 9 / in class	Quiz 2
Mar 26 / 23:59	Video Case Development – Submission	May 15 / 23:59	Final Take-home Essays – Submission

### Course Reading

*Textbooks for Classes 1-12 (Reserved at HKUST Library)*

- Russ Shafer-Landau (2019) *A Concise Introduction to Ethics*, New York: Oxford University Press.
- Barbara MacKinnon & Andrew Fiala (2018) *Ethics: Theory and Contemporary Issues* (9<sup>th</sup> edition), Boston, MA: Cengage Learning.

*Useful e-Texts and Online Resources for Classes 1-25*

- Ali Abbas (ed.) (2020) *Next-generation Ethics: Engineering a Better Society*, Cambridge: Cambridge University Press.
- Annabelle Lever & Andrei Poama (2019) *The Routledge Handbook of Ethics and Public Policy*, London: Routledge.
- Anthony Beavers (ed.) (2017) *Philosophy: Technology*, Farmington Hills: Cengage Learning.
- Deborah Johnson (2020) *Engineering Ethics: Contemporary and Enduring Debates*, New Haven, CT: Yale University Press.
- Edmund Seebauer & Robert Barry (2001) *Fundamentals of Ethics for Scientists and Engineers*, New York: Oxford University Press.
- Mark Coeckelbergh (2022) *Robot Ethics*, Cambridge: MIT Press.
- Markus Dubber, Frank Pasquale & Sunit Das (eds.) (2020) *The Oxford Handbook of Ethics of AI*, New York: Oxford University Press.
- Ronald Sandler (ed) (2014) *Ethics and Emerging Technologies*, Basingstoke, UK: Palgrave Macmillan.
- *The Stanford Encyclopaedia of Philosophy*, <http://plato.stanford.edu/>

*Other Useful Texts for Classes 1-25 (Reserved at HKUST Library)*

- Anthony Weston (2018) *A 21<sup>st</sup> Century Ethical Toolbox* (4<sup>th</sup> edition), New York: Oxford University Press.
- David Morrow (2018) *Moral Reasoning: A Text and Reader on Ethics and Contemporary Moral Issues*, New York: Oxford University Press.
- Jonathan Wolff (2020) *Ethics and Public Policy: A Philosophical Inquiry* (2<sup>nd</sup> edition), London: Routledge.
- Juan Enriquez (2020) *Right/Wrong: How Technology Transforms our Ethics*, Cambridge: MIT Press.

- Julian Baggini & Peter S. Fosl (2007) *The Ethics Toolkit: A Compendium of Ethical Concepts and Methods*, Oxford; Malden, Mass.: Wiley-Blackwell.
- Richard Burnor & Yvonne Raley (2018) *Ethical Choices: An Introduction to Moral Philosophy with Cases* (2<sup>nd</sup> edition), New York: Oxford University Press.

### **Case Teaching and Learning**

This course will experiment with the case pedagogy – ‘normative case teaching’ – a teaching and learning innovation project at HKUST, led by the course instructor. For enquiries, please contact the instructor or the research project coordinator, Miss Heliana LEE ([helianalee@ust.hk](mailto:helianalee@ust.hk)).

### **Course Communications**

All announcements are made through the course website on Canvas (<https://canvas.ust.hk/>). For e-mail communications, students should allow at least 3 working days for a reply. **All e-mail enquiries regarding any of the assessments above should be made at least 48 hours before their respective due dates.**

### **Class Rules**

For students in face-to-face classes, they should avoid using mobile phones except for class activities. **Video/sound recording is NOT allowed.** If there is a genuine need for video/sound recording, students must seek permission from the instructor before the session begins.

### **Academic Honesty**

Plagiarism and cheating are very serious offences. Students are reminded of the consequences for violating University’s regulations governing academic integrity and honesty. For details of the regulations, please visit: <https://registry.hkust.edu.hk/resource-library/academic-integrity>. For advice on avoiding plagiarism and copying, please visit: <http://libguides.ust.hk/writing/style-man>.

### **Quality Assurance**

Students are welcome to offer comments and suggestions on the course. The principal concern of this course is students’ learning, and therefore, the instructor may modify the schedule if this will facilitate their learning.

Last revised: January 31, 2023