ISOM 1380 TECHNOLOGY AND INNOVATION: SOCIAL AND BUSINESS PERSPECTIVES

SPRING 2026

Course Instructor	Dr. Yongsuk ("Yong") KIM Dept. of Information Systems, Business Statistics, and Operations Management (ISOM)
Class Times and Location	L2: Mondays & Wednesdays 09:00-10:20, LSK1009
Office Hours (Rm)	By appointment (LSK5045)
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Teaching Assistant	Ray PANG (imncpang@ust.hk)

Course Overview and Objectives

"Most Innovations fail and companies that don't innovate die." - Chesbrough

Managing technology and innovation is essential to the survival and growth of modern firms, yet it remains a complex and high-stakes challenge. Even established market leaders often lose their competitive edge when they fail to adapt. Because there is no "one best way" to manage innovation, this course provides the strategic tools necessary to navigate this uncertainty.

This course is designed to achieve three primary objectives:

- Critical Thinking & Curiosity: We will challenge your long-held assumptions by posing "innovation puzzles." You will learn to bridge the critical gap between developing a breakthrough technology and achieving commercial success through wide adoption.
- Strategic Frameworks: You will be exposed to diverse concepts and frameworks that analyze technological innovation from both business strategy and social perspectives.
- Applied Analysis: You will apply these theoretical frameworks to a real-world company of your choice, culminating in a set of sound, implementable recommendations. Learning Methodology To ensure a well-rounded educational experience, we utilize a mix of academic readings, interactive case discussions, in-class exercises, and a collaborative final team project.

About the Instructor

Professor Yong Kim is a faculty member of Information Systems at the HKUST Business School. He received his doctoral degree at the McCombs School of Business at the University of Texas at Austin. He also holds a master's degree in Human Computer Interaction (HCI) from the University of Michigan at Ann Arbor. Prior to graduate studies, he worked at IBM Business Consulting Services. In his research, he investigates IT-enabled open innovation such as crowdsourcing and user innovation community and IT-enabled knowledge sharing in distributed organizations, and human-AI collaboration.

Course Materials

- No required textbook; refer to the reading materials on Canvas.

Policy on generative-ai usage:

Generative AI (e.g., ChatGPT) can be used in this course for all the works submitted that count towards the grade except the examinations. But you must properly cite them. If they are detected to be AI generated material and are not cited at all, this is deemed as plagiarism and will be subjected to the rules and regulations of HKUST on academic integrity.

Instructor-Student Communication Policy

I encourage you to see me in person during my office hours by appointment in case you have course-related questions or concerns. If you cannot make it in person, feel free to email me (**please start your email subject line with "[ISOM 1380]"**). I will check and deal with class-related emails for half an hour every day during the week when I find time in the afternoon. So, I may be able to get back to you right away or a day later. Of course, you can always seek help from the TA as well.

Feedback Policy

I value getting your feedbacks on what we do in class and how I can further improve your learning. I encourage you to share your thoughts with me.

Class Policies

- Please arrive on time.
- Respect the views and opinions of your colleagues.
- Mobile devices are turned off or muted.
- No chatting during class! (Don't disturb others!)

Course Requirements and Grading

Grading

Percent	Requirement	Note
10%	Class participation • Self-introduction on Canvas (1%)…….. • Attendance (3%)……. • Contribution (3%)……..……. • Strategic Innovation Simulation (3%).....	 By Feb 15 (at the latest) Throughout the semester Throughout the semester On Mar 4 (S10)
30%	Mid-Term Exam - Exam I: MCQ-based test (24-26%) - Exam II: Essay-based test (14-16%)	Mar 18 (S14)
30%	Final Group Project • Group Formation…..……..... • Presentation (10%)…..……..... • Final Report (20%)..……...……	 By Mar 23 (S15) On Apr 27- May 4 (S23-25) On Apr 27 (S23)
30%	Final Exam - Exam I: MCQ-based test (24-26%) - Exam II: Essay-based test (14-16%)	TBA

Class Participation (10%)

Self-introduction on Canvas (1%)

Once your access is permitted, introduce yourself to the class on the discussion board. Look for the discussion thread titled "Please introduce yourself to us!"). Please answer the following questions.

1. *Name (First Name Last Name)*
2. *Preferred name*
3. *Major(s) and school year (also school/country - if you are an exchange student)*
4. *Where are you from?*
5. *Things you love to do*
6. *One truth and one lie (or vice versa) about you (but don't tell us which is which)*
7. *Technologies or products you are interested in*
8. *Anything else to say? (Promote yourself!)*

To earn your point, you should finish introducing yourself no later than **Feb 15**.

Class Contribution: Attendance (3%) and In-class Discussion (3%)

I come to class—on time—and I expect you to do the same. Throughout the semester (prior to the presentation weeks), your attendance will be *randomly* checked 4 times. If you miss one of the attendance checks, that's ok. You will still get a full mark (3/3). But if you miss more than once, every time you are found be absent, it will cost you one-point deduction.

I encourage you to be active in class by asking good questions, answering questions, and participating in in-class discussion. The evaluation of your class participation will be based on your substantive contribution to your and other students' learning experience, not merely on the quantity of words spoken. You are encouraged to ask questions and share your thoughts during class discussion. In order to facilitate an interactive class, I may "cold call" students if no student voluntarily speaks up. It will be a good opportunity to horn your public speaking skill and earn your participation point!

If you are naturally more reserved in a physical classroom setting, you can *supplement* your participation grade (3%) by being active on Canvas. You can contribute by (1) sharing relevant news articles or case studies, (2) answering questions from your peers, or (3) engaging in discussion threads created by the instructor.

Strategic Innovation Simulation (3%)

In S10, we will conduct a web-based simulation designed to bridge the gap between the theory of disruptive innovation and its practical impact. This exercise places you in a high-stakes managerial role where you must make critical investment choices between mature and emerging technologies. You will navigate uncertain and highly constraining real-world conditions to see how strategic decisions affect long-term viability.

Points for this exercise will be determined by the performance of your simulation group. Specific login details, team assignments, and performance metrics will be announced in class prior to the simulation date.

Exams (60%)

There are two exams: one mid-term (30%) and one final exam (30%). The exams will be based on the topics and related concepts taught during class. Exams will combine true/false, multiple choice questions, and "short" essays.

If you have (or had) to miss an exam due to extraordinary circumstances such as unexpected hospitalization or loss of a family member, please let me know as soon as you can and see me with a doctor's note and/or verifiable, reliable, and valid evidence. Only under such extraordinary circumstances, a make-up exam will be arranged for you but with an additional *oral* examination. In other cases, there will be no make-up exam if you miss the exam. Time conflicts with job interviews, other tests, travel plans, etc. will not be considered.

Final Group Project (30%)

The final project is a collaborative effort designed to apply the course frameworks to a real-world scenario. While specific project details will be announced in class, the following guidelines apply:

Teamwork & Accountability

- **Equal Contribution:** All team members are expected to contribute equally.
- **Peer Evaluation:** To ensure fairness, individual contributions will be assessed via peer evaluation at the end of the semester.
- **Conflict Resolution:** Project leaders should notify the instructor if the group encounters a serious "free-riding" problem that cannot be resolved internally.

1. Group Formation

- **Size:** Group size will be determined once enrollment is finalized.
- **Process:** Self-signup is encouraged; however, any students who have not joined a team by the deadline will be assigned to groups with available spots. We will finalize group formation in class (TBA).

2. Group Presentation (10%)

During the final weeks of the semester, your team will present its findings to the class.

- **Participation:** All members are expected to speak during the presentation.
- **Evaluation Criteria:** Grades are based on your mastery of the content, presentation delivery, and handling of questions during the Q&A

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3. Final Project Report (20%)

The report is a comprehensive, written elaboration of your presentation.

- **Format:** You should address the assignment questions in a holistic and integrated manner rather than a simple Q&A format. There is no strict page limit, but the report must provide significantly more depth than your slides.
- **Evaluation Criteria:** Reports are judged on quality, depth, feasibility, and novelty.

Note: Aim for a focused, deep analysis rather than a broad but shallow overview.

- **Submission:** The report must be submitted online via Canvas by the due date.

Class Schedule (Tentative – Please refer to Canvas for the latest updates)

Each session has a module of its own on Canvas wherein you can find what to learn on that session and access assigned readings and class notes.

Session/Date	Topic
Session 1 *Feb 2*	Course Overview
Session 2 *Feb 4*	Innovation Lifecycle & Adoption I
Session 3 *Feb 9*	Innovation Lifecycle & Adoption II
Session 4 *Feb 11*	Innovation Lifecycle & Adoption III
Session 5 *Feb 16*	Innovation Strategy & Capabilities I
Session 6 *Feb 18*	**Lunar New Year (No class)**
Session 7 *Feb 23*	Innovation Strategy & Capabilities II
Session 8 *Feb 25*	Innovation Strategy & Capabilities III
Session 9 *Mar 02*	Developing Innovation I
Session 10 *Mar 04*	Developing Innovation II
Session 11 *Mar 09*	Organizing for Innovation I
Session 12 *Mar 11*	Organizing for Innovation II
Session 13 *Mar 16*	Mid-Term Exam Review
Session 14 *Mar 18*	**Mid-Term Exam** **Location/Time: TBA**
Session 15 *Mar 23*	**Final Project Orientation and Group Formation**
Session 16 *Mar 25*	Promoting Innovation
Session 17 *Mar 30*	Open Innovation and Crowds I

Session/Date	Topic
Session 18 *Apr 01*	Open Innovation and Crowds II
Apr 3 - 8	**Mid-term Break**
Session 19 *Apr 13*	Social Impact & Ethics I
Session 20 *Apr 15*	Social Impact & Ethics II
Session 21 *Apr 20*	Protecting Innovation I
Session 22 *Apr 22*	Protecting Innovation II
Session 23 *Apr 27*	Project Presentations I **NOTE: SUBMIT YOUR FINAL GROUP PROJECT REPORT**
Session 24 *Apr 29*	Project Presentations II
Session 25 *May 04*	Project Presentations III
Session 26 *May 06*	Wrap-up and Review for Final Exam
	Final Exam **(Location/Time: TBA)**