Hong Kong University of Science and Technology
School of Business and Management
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ISOM 2010 – INTRODUCTION TO INFORMATION SYSTEMS

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COURSE DESCRIPTION

In virtually every industry and every firm, information technology is driving change, creating opportunities and challenges. Leaders who fail to understand the operational and strategic importance of information systems (IS) will not be able to keep up with the pace of their competitors. IS have moved beyond the automation of back office functions into the foreground of business strategy, and play critical roles in competitive positioning and business process design.

This course provides a broad coverage of technology concepts and trends underlying current and future developments in information technology (IT), and fundamental principles for the effective use of computer-based information systems. There will be a special emphasis on e-commerce, business integration and IT management. Other topics include: software, databases, data analytics, and enterprise applications. In additional to the fundamental conceptual and propositions in the IS area, a number of business applications and cases will be discussed; the newest trend in today's technology domain will also be discussed.

Learning Outcomes
The goal of this course is to provide you with an introduction to IT-enabled approaches to information management in business contexts.
Upon completion of the course, students will be able to
(T-Taught, P-Practiced, M-Measured)
1. Describe how a business organization's choice of strategy and process (what the firm does and how the firm does it) and their resulting effectiveness are closely related to the firm's information management and communications capabilities (OBE Goals 3, 4. T, P).
2. Form a foundation to develop quantitative and analytical techniques to solve business problems with innovative perspectives that extends beyond this course (Goals 1, 9. T, P, M).
3. Analyze the core technological and business issues and identify critical factors for business decision-making (Goals 1, 4. T, P, M).
4. Evaluate information systems; examine their relations with business strategy, process, and organization (Goal 3. T, P, M).

This course will also provide students with:
1. Skills in producing professional quality business documents, delivering professional quality presentations and communicating ideas persuasively (Goal 2. T, P, M).
2. Ability to lead and work effectively in a team (Goal 5. T, P).
3. Proficiency in using IT applications in business and management; tools for searching, organizing and processing information using appropriate information technology and systems (Goal 7. T, P, M).

4. Preparation for future careers in business and social environments that are deeply permeated with and dependent upon IT (Goals 3, 9. T, P).

We believe that an understanding of the topics covered in this course will pay subtle and unexpected dividends throughout your careers (Goal 9. T, P).

COURSE MATERIALS

Classes will include a mixture of videos, presentations, and lectures. There is **no required textbook** for this course. Additional readings and reference materials can be accessed through the course website. Students are expected to come to class prepared and participate in discussions.

EVALUATIONS

Class Participation	15%
Labs	15%
Group Project	20%
Midterm Exam	20%
Final Exam	30%
Total	**100%**

Class Participation (15%): There are two aspects of your class participation. First, students are expected to participate in class activities (e.g., surveys, self-tests, reading assignments) and attend the invited speakers' sessions in the "Industry Week" (5%). In-class participation, such as raising and responding to questions, is highly encouraged; not only does it enriches your learning, but it also contributes to a more interactive environment for all. However, because not everyone will have the opportunity to voice out due to the large class size, in-class participation will not count towards your course grade.

Second, students are expected to contribute to other students learning (10%). This will be achieved during the group project presentations, where you can provide your evaluation, feedback, and suggestions to help other groups improve their project. The respective groups and the instructor will assess your inputs.

Labs (15%): The class environment of the lecture (e.g., big class size, no computer access) is not conducive for teaching technical skills. Hence, there will be separate lab sessions of 50 minutes each to cover basic to advanced skills. In almost every lab session, there is a task that you need to complete during the lab session. You MUST attend the lab session to which you are assigned; lab instructors will ask unregistered students to leave. **You will not get credit for work done during a session for which you are not registered.** Also, content for lectures and lab sessions are non-overlapping – generally, the lectures emphasize on managerial and strategic implications of information technology, whereas the lab sessions focus on specific technical knowledge.

Group Project (20%): This is a group-based course project that is intended to allow you to exercise your insights and analytical abilities to a real-life business/application. The TA will assign students to their respective groups. The group is to develop a business idea for a new technology (e.g., online platform, system, software, mobile application). The main deliverable is a business plan detailing the technology and the target market. The groups need to apply what we discuss in class to their business ideas in the business plans. The page limit of the business plan (including references, tables, and appendices) is **8 pages (A4 paper, 1-inch margin on all sides, double-spaced, 11pt, Times New Roman).** The business plan is **due on May 15 (11:59pm).**

Please refer to Course Outline for the presentation schedule. There are 3 presentation groups per session, 20 minutes per group. The TA will assign the presentation slots to groups.

There are two deliverables for the group project: (1) the business plan (10%), and the project presentation (10%). I look for clarity, level of effort, and quality of content in the business plan and presentation when assigning grades.

Typically, all members of a group would receive the same grade for the group project. However, I will moderate individual students' group project grades based on peer evaluations. Students who perform exceedingly well in their peer evaluations could receive higher group project grades than their group mates. Conversely, students who do badly in their peer evaluations would receive lower group project grades.

Mid-term (20%) and Final (30%): These are major check points to ensure that you understand the key concepts that we introduce in this course. The mid-term examination will cover the Digital Economy and E-commerce topics, whereas the final examination will cover materials of the other topics. Review sessions will be scheduled to help you prepare for these examinations. In general, these examinations are non-technical in nature. There is **NO** make-up for the final examination.

ACADEMIC INTEGRITY

Academic integrity entails absolute honesty in one's intellectual efforts. HKUST places a strong emphasis on academic integrity and has introduced new regulations to back this up.

Special attention will be put on academic integrity demonstrated when you take this course. You should be especially aware of the policies on cheating and plagiarism. Cheating is any action that violates University norms or an instructor's guidelines for the preparation and submission of assignments. Such actions may include using or providing unauthorized assistance or materials on course assignments, or possessing unauthorized materials during an examination. Plagiarism involves the representation of another's work as your own, for example: (a) submitting as one's own any material that is copied from published or unpublished sources such as the Internet, print, computer files, audio disks, video programs or musical scores without proper acknowledgement that it is someone else's; (b) paraphrasing another's views, opinions or insights without proper acknowledgement or copying of any source in whole or in part with only minor changes in wording or syntax even with acknowledgement; (c) submitting as one's own work a report, examination, paper, computer file, lab report or other assignment which has been prepared by someone else. If you are unsure about what constitutes unauthorized help on an exam or assignment, or what information requires citation and/or attribution, please ask your professor. **Violations may result in the failure of the assignment, failure of the course, and/or additional disciplinary actions.**

For more information, please visit the following websites: http://tl.ust.hk/integrity/student-1.html

	Topic
Feb 19	Course Overview
Feb 24	Digital Economy (I)
Feb 26	Digital Economy (II)
Mar 2	Digital Economy (III)
Mar 4	E-Commerce (I)
Mar 9	E-Commerce (II)
Mar 11	E-Commerce (III)
Mar 16	E-Commerce (IV)
Mar 18	Mid-Term Exam Review
Mar 23	Online Platforms (I)
Mar 25	Midterm Exam
Mar 30	Online Platforms (II)
Apr 1	Business Analytics (I)
Apr 6	Business Analytics (II)
Apr 8	Business Analytics (III)
Apr 13	*No Class (Easter Monday)*
Apr 15	*Industry Week*
Apr 20	*Industry Week*
Apr 22	Big Data Analytics (I)
Apr 27	Big Data Analytics (II)
Apr 29	Group Project
May 4	Group Project
May 6	Group Project
May 11	Group Project
May 13	Emerging Technology
May 18	Course Recap

* Please refer to Lab Canvas for the lab schedule and syllabus. Contact the TA of your lab section for all lab matters.