ISOM4100: Information Systems Auditing

(Mixed Mode Lite – limited interactions with online students)

Instructor: James S. H. KWOK Email: jkwok@ust.hk Office: LSK 4080 Phone: (+852) 2358 7652

Course goals

This course provides a comprehensive approach for auditing information systems including specific procedures and illustrative case studies useful for auditors.

Learning outcomes

By the end of this course, students will be able to acquire the following knowledge:

- 1. Apply information systems auditor's mindset to IS auditing
- 2. Describe risks and controls in organizations

Course description

This course provides a comprehensive approach for auditing information systems that is useful for IS auditors. IS auditing cases and examples will be used to illustrate IS auditing process, practice, and management. The course is intended for students to learn IS auditor's mindset and apply it in auditing information systems, for example, outsourced systems, business servers, cloud services, and so on. Another major IS auditing area, which is risks and controls is addressed and emphasized.

This course helps students prepare for CISA (Certified Information Systems Auditor) exams in their careers. This course in general covers the following chapters in the CISA curriculum:

Chapter 1: The Process of Auditing Information Systems

Chapter 2: Governance and Management of IT

Chapter 3: Information Systems Acquisition, Development, and Implementation (Partial)

The course consists of **THREE** parts. The first part introduces core information systems auditing concepts and IS auditing process; the second part discusses how senior management makes IT decisions with IT governance. The third part discusses how IS auditors evaluate organizational projects.

Types of Students and Teaching Mode

In-HK students: Those in-HK students who are physically in Hong Kong are expected to attend classes, in-class exercises, and the final exam **in person**. Those students are **NOT allowed** to access our Zoom meeting unless special approval is granted.

Not-in-HK students: Those not-in-HK students who have been approved by ARRO are allowed to attend classes online using Zoom.

Teaching Mode: Mixed Mode Lite with Active Learning

- Both groups of students are required to attend classes either in person or online using Zoom.
- Class recordings will be uploaded to Canvas when they become available (usually take less than 24 hours).
- There is no class attendance requirement in this course.
- **Final exam**: In-HK students are required to attend a physical final exam. There will be no different exam arrangements for in-HK students. Not-in-HK students will have a take-home final exam, which has different questions than those in the physical final exam. The take-home exam and physical final exam are of equivalent difficulty levels.
- For the Mixed Mode Lite teaching mode, there will be limited interactions between the course instructor and not-in-HK students. The course instructor will check messages in the chatroom once or twice during the class and may NOT be able to reply to all messages.
- Active learning: There will be many in-class activities, including in-class exercises in this course, and students are required to work on tasks together during the class. This helps students learn the topics more effectively.

Assessment scheme

An inevitable part of this end of any university course is the evaluation and the grade. In any course, the most important evaluation is a student's self-evaluation. How many new and useful ideas and skills did students learn from the course? Has the course changed student views about themselves, workgroups, and organizations? If so, student efforts here will have paid off. The student's course goals will be assessed in the following manner, and the percentage of grade may be broken down as below:

Compo	onents	Learning goals assessed	Percentages of the grade
Α.	Assignment (x1) (Group)	1, 2	30%
В.	In-class exercise (x3) (Individual)	1, 2	30%
С.	Final Exam	1, 2	40%
	TOTAL:		100%

A. Assignment (30%)

The objective of assignment is to assess student's knowledge and understandings of IS auditing and how students apply them to solve different IS auditing cases. It is a group work. A pre-assigned group of 4 to 6 students will study a case and present their findings. Each group member needs to make a fair amount of contribution to the **submitted work**. A peer evaluation will be conducted after the deadline.

The required deliverables include: (1) a report in pdf file format, (2) a PowerPoint file, (3) a video presentation file in mp4 file format (all members are required to participate), and (4) supporting documents.

Selected groups will present their findings by showing their video presentation files in the last class.

(**Warning**: Peer evaluation will be conducted after the deadline. Students should make sure they make a fair contribution to the submitted assignment. An independent judgment is applied to review each case, and an appeal on the decision is **NOT** allowed.)

B. In-class Exercise (30% = 2 Exercises x 15%)

There are in-class exercises after major topics. They are individual in-class exercises, and therefore each student needs to submit his/her own answers before the deadline. There are **THREE** in-class exercises in total, each carries 15% of the total mark. **In-class exercises need to be completed in the class**. Only the BEST two scores will be countered toward a student grade. <u>There will be NO makeup in-class exercises for whatever reasons</u>.

During the in-class exercise session, all students are required to comply with the following guidelines and requirements. Some are for students joining the class via Zoom. Fail to do so will result in a mark deduction penalty, e.g., 10% reduction in the marks.

- Attend the entire lecture (arriving late and leaving early are not acceptable)
- (Zoom only) Set the display name as follows (e.g., James (jkwok-20202020)
- (Zoom only) Turn on the camera at all times and make sure we can see your face clearly
- Submit your work/answer to Canvas (or via email) before the submission deadline

Note: Late submission (our time stamp ONLY): Any late submission will result in ZERO marks. Students may submit to Canvas or by email to both instructor and TA.

C. Final Exam (40%)

There is a Final Exam, which covers **ALL topics** taught in the semester. Further information will be provided in the last class.

Grade appeal

All scores will be uploaded to Canvas when ready. It is the student's responsibility to check their scores and make sure they are correct. Any score appeal must be filed through email to jkwok@ust.hk. No score appeal shall be allowed after a checking/appeal period (e.g., 36 hours after a score is released) if applicable.

[If a student cannot come to check his/her paper during the checking period, the student's score will be finalized by default. I am afraid we will not change/correct his/her score after the checking/appeal period.]

Student learning resources

Reference book

ISACA, CISA Review Manual 2013/2014/2015/2016/2017

Course Site

Updates of the course contents and other information will be posted on Canvas - http://canvas.ust.hk/. Students are advised to check this site regularly throughout the semester.

Course schedule (Tentative)

L1: 01-Sept – 26-Nov: Wed/Fri 3:00pm – 4:20pm Venue: Room G010, CYT Bldg Zoom ID: 956 6869 3333

Week	Date	Topics	Remark
1	1-Sept	Intro Course	
	3-Sept	Risks 1	
2	8-Sept	Risks 2	
	10-Sept	Examples of Risk and Control 1	
3	15-Sept	Examples of Risk and Control 2	
	17-Sept	In-class Ex 1	
4	24-Sept	Controls 1	
5	29-Sept	Controls 2	
6	6-Oct	Controls 3	
	8-Oct	In-class Ex 2	
7	13-Oct	IS Auditor's Mindset 1	
	15-Oct	IS Auditor's Mindset 2	
	20-Oct	Risk Management 1	
8	22-Oct	Risk-based Audit Approach 1	
0	27-Oct	Risk-based Audit Approach 2	
9	29-Oct	Performing IS Audit 1	
10	3-Nov	Risks and Controls: Template 1	
10	5-Nov	Risks and Controls: Template 2	
	10-Nov	In-class Ex 3	
11	12-Nov	IT Gov.	Assignment 1: Release
	17-Nov	IT Gov.	
12	19-Nov	SDLC	
13	24-Nov	SDLC	Assignment 1: Due
	26-Nov	Presentation and Revision	

Policies for using ZOOM

For those students who join the class via ZOOM, they are required to comply with the policies.

- A Zoom meeting ID is already released on Canvas
- Login Zoom with your HKUST Email
- Students are required to install Zoom before coming to the class
- Students must enter their display names as the first name, ITSC account name, and student ID. (e.g., James (jkwok-20202020)). When groups are formed, students must display their group numbers. (e.g., James (jkwok-20202020), Group 1)
- Students will be given a unique meeting password after add/drop period. A separate email will be sent to individual students regarding the unique meeting password of the lecture
- We will reserve the right to remove any student from the meeting if the student does not follow the rules.

Teaching staff contact details

Prof. Kwok's office is LSK 4080, 4th floor. Students are more than welcome to drop by any time with any of their questions. For any urgent matters, students may contact Prof. Kwok by phone (2358-7652), but the best way is by email. Prof. Kwok will check email frequently. Our Teaching Assistants (TA) for this course will be available for any questions regarding subject materials. Our TA is also responsible for grading and other administrative formalities.

Academic honesty

Academic integrity is a critical value of the university community. Integrity violations destroy the fabric of a learning community and the spirit of inquiry that is vital to the effectiveness of the University. Prof. Kwok has no tolerance for cheating and there are no acceptable excuses. Anyone caught cheating, plagiarizing, and any other form of academic dishonesty will have their course grade lowered by at least one letter grade. In addition, Prof. Kwok is bound to report any unethical behavior or evidence of dishonesty in this course to the University. Please remember the current university rule: "If a student is discovered cheating however minor the offense, the course grade will appear on the student's record with an X, to show that the grade resulted from cheating. This X grade stays on the record until graduation. If the student cheats again and "earns" another X grade, the student will be dismissed from the University." Plagiarism is copying anything (text or ideas) from another source without citing that source. If students use another person's idea, students must cite it, even if students rewrite the idea in their own words. Extreme care must be taken to avoid the passing of other's work as one's own. Students are required to provide appropriate citations when students use ideas and arguments or otherwise draw on others' work. If students use research from another source or the Web students MUST cite the source. This is true even if students use only the general idea and not the exact words.

Learning environment

Prof. Kwok welcomes feedbacks on his teaching throughout the semester. Students are encouraged to contact Prof. Kwok or our TA any time students have any questions, suggestions, concerns, or would like to ask for advice. After student groups are formed, Prof. Kwok will ask for one volunteer from each group (optional) to serve on the student feedback committee. The purpose of this committee is to act as a feedback channel for Prof. Kwok to improve his teaching and enhance student's learning experience. Prof. Kwok will meet with this committee to gather their feedback periodically. It would be a good opportunity if students wish to take a more active role in class management rather than waiting to submit their comments after the course is over.