

ISOM4100: Information Systems Auditing

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, risks and controls is addressed and emphasized.

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

Teaching approach

The teaching approach of this course is based on the notion of sustained, deep learning by applying knowledge through lecture. Lecture sessions are also structured to engage the students in learning proactively (pre-class reading, and pre-class discussion), actively (in-class exercises of IS auditing topics and in-class discussion of IS auditing problems) and reflectively (in-class discussion of personal views through the answers of in-class exercises).

Teaching & Learning Activities	Roles in the Course	Course Learning Outcomes addressed
Lecture	Explain key concepts to students using an active learning approach, in-class discussion of questions.	1, 2
Case	It requires student groups to apply their understandings in IS auditing knowledge to solve IS auditing problems.	1, 2
In-class exercise	Students will apply IS audit process and practice to handle IS auditing cases	1, 2

Assessment scheme

An inevitable part of this end of any university course is the evaluation, and the grade. Actually, 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, work groups 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:

Components	Learning goals assessed	Percentages of the grade
A. Take Home Exam (Individual)	1, 2	35%
B. Case (x3) (Group and Individual)	1, 2	20%
C. In-class exercise (x3) (Group)	1, 2	45%
TOTAL:		100%

A. Take Home Exam (35%)

All course materials, including assigned readings, lecture notes, and exercises are subject to the examination. The exam will be a case-study exam which allows students to demonstrate their practical understanding of the course topics. Students must submit their answers to Canvas before the deadline.

There will be **no make-up exams** except due to extraordinary circumstances beyond student’s control such as medical emergencies. In case of absence due to medical emergencies, students must submit appropriate documentation issued by a registered medical practitioner to the course instructor by email to be considered for a possible make-up exam.

(Warning: The make-up exam will be in essay format. Students who can take the make-up exam need to write up a **research article that is composed of introduction, references, proper citation, and other sections. The article needs to be completed **within 48 hours** after it has been assigned. There is **NO SECOND****

CHANCE for make-up exam for whatever reasons provided by the students. Fail to submit the research article for whatever any reasons, including email problems, and no internet problems will result in a **ZERO** mark for the exam.)

B. Case (20% = 1 case x 16% + 2 cases x 2%)

The objective of case 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 in class.

Case participation will be graded based on well-prepared questions and participation. These marks will be added towards grade of case presentation.

There will be **THREE** cases in total. Students will work on the cases as either presentation students, or participating students. Their tasks and scores for ONE case are listed below.

Case	Presentation group (as presentation students)	Other groups (as participating students)
	- Detailed analysis - Case presentation	- Answer case questions (2% max) - Participate in case discussion (0.5% max)
	16% (max) in total	2% (max) in total
	Submission*: - Presentation file - Other documents if needed Deadline: 48 hours before presentation *For Case 2, the deadline will be 24 hours before presentation	Submission: - Answers Deadline: 24 hours before presentation
	Selected presentation groups will be informed 24 hours before presentation All members in the selected groups MUST attend the corresponding presentation section	

C. In-class Exercise (45% = 3 Exercises x 15%)

There would be an in-class exercise after the completion of each topic. Exercises are group-based and discussion among classmates are required. There would be 3 in-class exercises in total, each carries 15% of the total mark. In-class exercise should be submitted within 24 hours after class.

(WARNING: A peer evaluation will be conducted after each in-class exercise. The student's final scores are mainly derived from the results of peer evaluation. The course instructor will apply subjective judgement to review the peer evaluation submitted by students within the same group to determine a student's final score.)

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 appeal to score has to be filed through email to jkwok@ust.hk. No appeal to a particular score shall be allowed after a checking period (e.g., 72 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 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: Mon. 13:30 – 14:50 & Fri. 09:00 – 10:20 (Zoom: 918 7871 7493)

Wk	Date	Topics	CISA chapter	
1	7/9	Introduction	1	
	11/9	Business Objectives, Risks and Controls		
2	14/9	IS Auditor's Mindset		
	18/9	IS Auditor's Mindset (Practice: Major risk and effective controls)		
3	21/9	IS Auditing Process - Pt1		
	25/9	IS Auditing Process - Pt2		
4	28/9	IS Auditing Process - Pt3		
	2/10	Public Holiday		
5	5/10	IS Auditing Process - Pt4		
	9/10	Revision of IS Audit Process		
6	12/10	In-class Exercise 1		
	16/10	Case 1 presentation		
7	19/10	IT Governance - Pt1		2
	23/10	IT Governance - Pt2		
8	26/10	Public Holiday		
	30/10	IT Governance - Pt3		
9	2/11	Revision of IT Gov		
	6/11	In-class Exercise 2		
10	9/11	Case 2 presentation		
	13/11	SDLC - Pt1		
11	16/11	SDLC - Pt2	3	
	20/11	SDLC - Pt3		
12	23/11	SDLC - Pt4		
	27/11	Revision of SDLC		
13	30/11	In-class Exercise 3		
	4/12	Case 3 Presentation		

Policies for using ZOOM

This course provides online class via ZOOM. Here are the policies for using ZOOM.

- A Zoom meeting ID has already been 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 first name, ITSC account name and student ID. (e.g., **James (jkwok-20202020)**). When groups are formed, students must also display their group number as well. (e.g. **James (jkwok-20202020), Group 1**)
- **Students must only attend their own assigned lecture and lab session. L1 students can only join L1 lecture, same goes to L2.**
- **Students will be given a unique meeting password. A separate email will be sent to individual students regarding the unique meeting password of the lectures**
- We will reserve the rights to remove you from meeting if the above rules are not complied by students.

Teaching staff contact details

Prof. Kwok's office is in 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 email. Prof. Kwok will check email frequently. Our Teaching Assistants (TA) for this course is Josh MAN, he will be available for any questions regarding subject materials. They are 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 absolutely 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 offence, 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 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 from 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.