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. 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. Case (x3) (Group)	1, 2	55%
B. In-class exercise (x3) (Individual)	1, 2	45%
TOTAL:		**100%**

A. Case (55% = 1 case x 35% + 2 cases x 10%)

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. Each group member needs to make a fair amount of contribution to the **submitted work**. A peer evaluation will be conducted after each case study.

Each student needs to present one case and participate in the other two cases. When a student prepares for case presentation, the student is known as a presentation student (or a member of presentation group). When a student is NOT responsible for case presentation, but participants in the case discussion and answers some case questions, the student is known as a participation student.

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 participation students. Their tasks and scores for ONE case are listed below.

Case	Presentation group (as presentation students)	Other students (Individual) (as participation students)
	- Detailed analysis - Case presentation	- Answer case questions (10% max) - Participating in case discussion (2% max)
	35% (max) in total	10% (max) in total
	Submission: - Presentation files (e.g., PPT) - Video presentation (in MP4) - Other documents if needed	**Submission**: - Answers - Supporting documents if needed
	Selected presentation groups will be informed before presentation All members in the selected groups MUST attend the corresponding presentation session	

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

There would be an in-class exercise after the completion of each topic. They are individual in-class exercises, and therefore each student needs to submit his/her own answer before the deadline. There are 3 in-class exercises in total, each carries 15% of the total mark. In-class exercises need to be completed in the class (around 60 minutes).

During the in-class exercise session, all students are required to comply with the following guidelines and requirements. Fail to do so will result in a mark deduction penalty.

- Set the display name as follows (e.g., **James (jkwok-20202020**)
- Turn on the camera at all time and make sure we can see your face clearly
- Submit your work/answer to Canvas (or via email) before the submission deadline

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:   05-JAN - 07-JAN: Tue/Thu 09:00 – 12:20
       09-JAN - 26-JAN: Tue/Thu/Sat 09:00 – 12:50
       LSK 1005 (and/or Zoom: 995 5139 8244)

Week	Date	Topics	Case
1	5 Jan	Introduction Business Objectives, Risks and Controls	
	7 Jan	IS Auditor's Mindset IS Auditor's Mindset Practice	
	9 Jan	IS Auditing Process - Pt1 IS Auditing Process - Pt2	
2	12 Jan	IS Auditing Process - Pt3 IS Auditing Process - Pt4	
	14 Jan	**Revision of IS Audit Process** **In-class Exercise 1**	Case 1 release on 14 Jan
	16 Jan	*Case 1 presentation* IT Governance - Pt1 IT Governance - Pt2 IT Governance - Pt3	Case 1 submission on 13 Jan (by 5pm)
3	19 Jan	**Revision of IT Gov** **In-class Exercise 2**	Case 2 release on 19 Jan
	21 Jan	*Case 2 presentation* SDLC - Pt1 SDLC - Pt2	Case 2 submission on 20 Jan (by 5pm)
	23 Jan	SDLC - Pt3 SDLC - Pt4 **Revision of SDLC**	Case 3 release on 23 Jan
4	26 Jan	*Case 3 presentation* **In-class Exercise 3**	Case 3 submission on 25 Jan (by 5pm)

<u>**Policies for using ZOOM**</u>

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 will be given a unique meeting password. A separate email will be sent to individual students regarding the unique meeting password of the lecture**
- 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 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 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.