City University of Hong Kong
Course Syllabus

offered by Department of Accountancy
with effect from Semester A 2022/23

Part I Course Overview

Course Title:	Accounting Information Systems
Course Code:	AC6560
Course Duration:	1 semester
Credit Units:	3
Level:	P6
Medium of Instruction:	English
Medium of Assessment:	English
Prerequisites: *(Course Code and Title)*	AC5511 Financial Accounting/Financial and Management Accounting, or AC5601 Corporate Accounting I, or AC5603 Corporate Financial Reporting
Precursors: *(Course Code and Title)*	Nil
Equivalent Courses: *(Course Code and Title)*	Nil
Exclusive Courses: *(Course Code and Title)*	Nil

Part II Course Details

1. Abstract

This course is designed to introduce a variety of topics about the systems used by a company to process its accounting information. The course focuses on automated accounting information systems as a tool to understand and integrate processes, process activities and data, perform analysis, and create information to facilitate managerial decision-making.

This course aims to:

1. provide students with knowledge of the nature and role of accounting information systems in a business;
2. prepare students to identify internal control risk and suggest appropriate controls within an accounting information system;
3. develop students' ability to model business processes and create accounting information database;
4. develop students' knowledge of different business processes, including sales/collection, acquisition/payment;
5. develop students' knowledge of new information technology development and its application in business.

2. Course Intended Learning Outcomes (CILOs)

(CILOs state what the student is expected to be able to do at the end of the course according to a given standard of performance.)

No.	CILOs	Weighting (if applicable)	Discovery-enriched curriculum related learning outcomes (please tick where appropriate)		
			A1	*A2*	*A3*
1.	Describe the basic concepts of e-Commerce, enterprise information system in general, and accounting information system in particular. Describe the role of e-Commerce and information system in the Hong Kong and global business environment.	10%	✓	✓	
2.	Justify the use of different types of information systems. Describe the necessary activities in all the stages of the systems development life cycle (SDLC).	10%	✓	✓	
3.	Identify internal control weaknesses in corporate information system in general and in accounting information system in particular and suggest appropriate controls over those weaknesses.	10%	✓	✓	
4.	Describe the activities and informational needs of the various business processes in a typical firm.	20%	✓	✓	
5.	Create different conceptual models for various business processes.	20%	✓	✓	

6.	Convert a conceptual business process model into a physical implementation by using database applications like Microsoft Access.	10%	✓	✓	✓
7.	Explain how information systems are used to support implementation of business and functional strategies, justify the concepts of "Big Data", "Data Mining", "Artificial intelligence", "Machine learning", "Robotic Process Automation", "Block Chain", etc., and how these factors affects the corporation's decision making process.	10%	✓	✓	✓
8.	Describe the basic steps of Data Analytics using IMPACT framework, and design data analytics plans for business problems.	10%	✓	✓	✓
		100%			

A1: Attitude
Develop an attitude of discovery/innovation/creativity, as demonstrated by students possessing a strong sense of curiosity, asking questions actively, challenging assumptions or engaging in inquiry together with teachers.

A2: Ability
Develop the ability/skill needed to discover/innovate/create, as demonstrated by students possessing critical thinking skills to assess ideas, acquiring research skills, synthesizing knowledge across disciplines or applying academic knowledge to self-life problems.

A3: *Accomplishments*
Demonstrate accomplishment of discovery/innovation/creativity through producing /constructing creative works/new artefacts, effective solutions to real-life problems or new processes.

3. Teaching and Learning Activities (TLAs)

(TLAs designed to facilitate students' achievement of the CILOs.)

TLA	Brief Description	CILO No.								Hours/week (if applicable)
		1	2	3	4	5	6	7	8	
Interactive seminars	Interactive seminars focusing on the development of general knowledge, analytical skills, communication skills and modelling capabilities through the presentation of nature and role of e-Commerce and information systems, the types and the implementation of information system and contemporary issues such as Big data, data mining, artificial intelligence, machine learning, robotic process automation, and block chain.	✓	✓	✓	✓	✓			✓	3/10 weeks
Computer lab exercises	Computer lab exercises to implement different control techniques		✓				✓			2/1 week

Lectures and in class cases	Lectures and associated in class cases related to identifying and controlling for internal control risks in e-Commerce and information systems.		✓					✓		3/1week
In class learning activities	Different cases in various business processes given in classes to enable students to be able to have hands-on experience on modelling and design of accounting information systems.[#]			✓		✓				2/3 weeks
Computer lab exercises	Computer lab exercises focusing on hands-on activities on Microsoft Access to convert logical relational models to physical databases and applying internal control activities in database implementation.					✓	✓			2/1 week

[#] **DEC TLA element**

4. Assessment Tasks/Activities (ATs)

(ATs are designed to assess how well the students achieve the CILOs.)

Assessment Tasks/Activities	CILO No.								Weighting	Remarks
	1	2	3	4	5	6	7	8		
Continuous Assessment: **50%**										
Group project [#] Students are divided into groups (3-5 students for each group). Each group is required to explain the contemporary issues related to e-Commerce, information systems, Big Data, Data Mining, Artificial Intelligence, Machine Learning, Robotic Process Automation, Block Chain etc., in a written report. In addition, each group is required to make a presentation.	✓		✓	✓	✓		✓		20%	
In-class case discussion, online quizzes, homework, and participation Students are required to contribute to in-class case	✓	✓	✓			✓		✓	30%	

discussion, online quizzes, and other assignment, which are related to the topics in E-commerce, corporate information system, accounting information system, and data analytics plans.										
Examination: **<u>50%</u>** (duration: 3 hours) [Closed-book examination]										
<u>Final examination</u> Students are required to understand and explain the details about the concept and role of e-Commerce, the types and implementation of corporate information systems, and contemporary issues such as Big Data, Data Mining, Machine Learning, Robotic Process Automation, Block Chain, and Artificial Intelligence. In addition, students are assessed on the details about various business cycles, basic and expanded REA models, and integrated REA model. Also, students are required to analyse business cases and develop data analytics plans for business problems.	✓	✓	✓	✓	✓		✓	✓	50%	
									100%	

[#] **DEC AT element**

Students are required to pass both coursework and examination components to guarantee to pass the course. Failing either component may lead to failure in the course. The passing mark is generally 50.

5. Assessment Rubrics

(Grading of student achievements is based on student performance in assessment tasks/activities with the following rubrics.)

Applicable to students admitted in Semester A 2022/23 and thereafter

Assessment Task	Criterion	Excellent (A+, A, A-)	Good (B+, B)	Marginal (B-, C+, C)	Failure (F)
1. Group project	ABILITY to understand and explain the contemporary issues related to e-Commerce, information systems, Big Data, Data Mining, Artificial Intelligence, Machine Learning, Robotic Process Automation, and Block Chain, etc.	High	Moderate	Basic	Not even reaching marginal levels
2. In-class case discussion, online quizzes, homework, and participation	ABILITY to understand and explain the concepts of e-Commerce, corporate information system, and accounting information system and to design data analytics plans.	High	Moderate	Basic	Not even reaching marginal levels
3.Final examination	ABILITY to understand and explain the details about the concept and role of e-Commerce, the types and implementation of corporate information systems, and contemporary issues such as Big Data, Data Mining, Artificial Intelligence, Machine Learning, Robotic Process Automation, and Block Chain. ABILITY to explain in detail about various business cycles, basic and expanded REA models, and integrated REA model. ABILITY to design data analytics plans for business problems and identify scenarios for applying process automation.	High	Moderate	Basic	Not even reaching marginal levels

Applicable to students admitted before Semester A 2022/23

	Assessment Task	Criterion	Excellent (A+, A, A-)	Good (B+, B, B-)	Fair (C+, C, C-)	Marginal (D)	Failure (F)
1.	Group project	ABILITY to understand and explain the contemporary issues related to e-Commerce, information systems, Big Data, Data Mining, Artificial Intelligence, Machine Learning, Robotic Process Automation, and Block Chain, etc.	High	Significant	Moderate	Basic	Not even reaching marginal levels
2.	In-class case discussion, online quizzes, homework, and participation	ABILITY to understand and explain the concepts of e-Commerce, corporate information system, and accounting information system and to design data analytics plans.	High	Significant	Moderate	Basic	Not even reaching marginal levels
3.	Final examination	ABILITY to understand and explain the details about the concept and role of e-Commerce, the types and implementation of corporate information systems, and contemporary issues such as Big Data, Data Mining, Artificial Intelligence, Machine Learning, Robotic Process Automation, and Block Chain. ABILITY to explain in detail about various business cycles, basic and expanded REA models, and integrated REA model. ABILITY to design data analytics plans for business problems and identify scenarios for applying process automation.	High	Significant	Moderate	Basic	Not even reaching marginal levels

Part III Other Information (more details can be provided separately in the teaching plan)

1. Keyword Syllabus

(An indication of the key topics of the course.)

Accounting Information Systems, data protection and privacy law, Internal Controls, relational database, business process, risk analysis, Information Technologies, Data Analytics

2. Reading List

2.1 Compulsory Readings

(Compulsory readings can include books, book chapters, or journal/magazine articles. There are also collections of e-books, e-journals available from the CityU Library.)

1.	Vernon J. Richardson, C.J. Chang, and R. Smith. *Accounting Information Systems*. McGraw Hill.
2.	Vernon Richardson, Katie Terrell and Ryan Teeter. *Data Analytics for Accounting*.

2.2 Additional Readings

(Additional references for students to learn to expand their knowledge about the subject.)

1.	Cheryl L. Dunn, J. Owen Cherrington and Anita S. Hollander, *Enterprise Information Systems*, 3rd edition, McGraw Hill.
2.	Marshall Romney and Paul Steinbart, *Accounting Information Systems*, 14th edition, Prentice Hall.
3.	Robert Hurt, *Accounting Information Systems*, 4th edition, McGraw Hill.
4.	Canvas site for the course