City University of Hong Kong
Course Syllabus

offered by Department of Information Systems
with effect from Semester A 2017 / 2018

Part I   Course Overview

Course Title: Enterprise Architecture

Course Code: IS6620

Course Duration: One Semester (13 weeks)

Credit Units: 3

Level: P6

**Medium of
Instruction:**   English

**Medium of
Assessment:**   English

Prerequisites:
(Course Code and Title)   Nil

Precursors:
(Course Code and Title)   Nil

Equivalent Courses:
(Course Code and Title)   IS6620M Enterprise Architecture

Exclusive Courses:
(Course Code and Title)   Nil

Part II   Course Details

1.   Abstract

The course aims to introduce the concepts of enterprise architecture, and to elaborate on the frameworks and methodologies for developing, documenting and deploying enterprise architecture supporting the business strategies

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.	Explain the concepts of EA and its role in supporting business strategies.	10%			
2.	Apply an EA framework and a method for developing and deploying enterprise architecture.	30%	✓	✓	
3.	Analyze an organization's EA and recommend improvements including an appropriate transition plan.	30%	✓	✓	
4.	Determine how the emerging technologies and architectures can be exploited for developing and implementing EA.	20%	✓	✓	
5.	Identify and assess the governance and change management issues in implementing EA.	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.)

Seminar   :   39 hours

TLA	Brief Description	CILO No.					Hours/week (if applicable)
		1	2	3	4	5	
TLA1: Seminars	The seminar sessions will cover the topics listed in the keyword syllabus supported by activities such as case study analysis and discussions, problem-solving and artefact development.	✓	✓	✓	✓	✓	
TLA2: Classroom activities	Throughout the semester, different types of classroom activities will be conducted such as: • ***Real world cases studies discussions***: students will apply and integrate what they learn through classroom discussions and reading into real-world case analyses. • ***Role play***: To get in-depth understanding of the concepts, role-playing exercises will be	✓	✓	✓	✓	✓	

TLA	Description	1	2	3	4	5	
	conducted in classes to stimulate real world scenarios.						
TLA3: Practical exercise – individual work	Students will be required to develop artifacts at each level of the EA framework for a given organization or a case study. Part-time students are encouraged to select the organization where they are employed for this work. This exercise provides opportunities for practicing EA development skills.		✓	✓	✓		
TLA4: Group project – team work	The group project requires a detailed study an Enterprise Architecture topic, submission of a well-written report and presentation of key findings. This discovery-based activity requires students not only to apply skill learned during the course but also practice written and oral communication skills.	✓	✓	✓	✓		

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		
Continuous Assessment: 60%							
AT1: Participation Students should participate in the class activities, such as, small group discussions and presentations, self-reflection, raise and answer questions, and the like.		✓	✓	✓		15%	
AT2: Individual Assignment Students will be required to develop artifacts at each level of the EA framework for a given organization or a case study. Part-time students are encouraged to select the organization where they are employed for this work.		✓	✓			15%	
AT3: Group Project A group project, which includes a project report (25%) and presentation (5%), will be assigned for students to analyse an Enterprise Architecture topic in-depth and to share their findings with other course participants.		✓	✓	✓	✓	30%	
Examination: 40% (duration: one 2-hour exam)							
AT4: Final Examination A written examination is developed to assess students' competence level with respect to the intended learning outcomes.	✓	✓	✓	✓	✓	40%	
						100%	

Note: Students must pass BOTH coursework and examination in order to get an overall pass in this course.

5. Assessment Rubrics

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

Assessment Task	Criterion	Excellent (A+, A, A-)	Good (B+, B, B-)	Fair (C+, C, C-)	Marginal (D)	Failure (F)
AT1: Participation	Capability to accurately apply an EA framework and a method to develop all the relevant artifacts at different architecture levels.	High	Significant	Moderate	Basic	Not even reaching marginal levels
	Ability to accurately analyze a given EA and recommend relevant improvements with justification.	High	Significant	Moderate	Basic	Not even reaching marginal levels
	Capability to propose innovative and feasible EA solutions making use of emerging technologies and architectures to support an organization's business strategies.	High	Significant	Moderate	Basic	Not even reaching marginal levels
AT2: Individual Assignment	Capability to accurately apply an EA framework and a method to develop all the relevant artifacts at different architecture levels.	High	Significant	Moderate	Basic	Not even reaching marginal levels
	Ability to accurately analyze a given EA and recommend relevant improvements with justification.	High	Significant	Moderate	Basic	Not even reaching marginal levels
AT3: Group Project	Capability to accurately apply an EA framework and a method to develop all the relevant artifacts at different architecture levels.	High	Significant	Moderate	Basic	Not even reaching marginal levels
	Ability to accurately analyze a given EA and recommend relevant improvements with justification.	High	Significant	Moderate	Basic	Not even reaching marginal levels
	Capability to propose innovative and feasible EA solutions making use of emerging technologies and architectures to support an organization's business strategies.	High	Significant	Moderate	Basic	Not even reaching marginal levels
	Ability to accurately identify and assess all the relevant governance and management issues in implementing changes to EA.	High	Significant	Moderate	Basic	Not even reaching marginal levels
AT4: Final Examination	Ability to accurately describe all key EA concepts, and the role of in supporting various types of business strategies.	High	Significant	Moderate	Basic	Not even reaching marginal levels
	Capability to accurately apply an EA framework and a method to develop all the relevant artifacts at different architecture levels.	High	Significant	Moderate	Basic	Not even reaching marginal levels

		High	Significant	Moderate	Basic	Not even reaching marginal levels
	Ability to accurately analyze a given EA and recommend relevant improvements with justification.	High	Significant	Moderate	Basic	Not even reaching marginal levels
	Capability to propose innovative and feasible EA solutions making use of emerging technologies and architectures to support an organization's business strategies.	High	Significant	Moderate	Basic	Not even reaching marginal levels
	Ability to accurately identify and assess all the relevant governance and management issues in implementing changes to EA.	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.)

- Enterprise architecture (EA) concepts
- Alignment among the layers of EA
- Operating models and supporting enterprise architectures
- Stages of EA maturity
- Comparison of EA frameworks and methodologies
- EA deployment and governance
- Exploiting emerging architectures (e.g., SOA, EDA and virtualization) and technologies (e.g., cloud, social and mobile computing)
- Skills for enterprise architects

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.	Nil

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

1.	Bernard, Scott A., An introduction to enterprise architecture, AuthorHouse, 2012.
2.	Bente, Stefan, Uwe Bombosch, and Shailendra Langade, Collaborative Enterprise Architecture: Enriching EA With Lean, Agile, and Enterprise 2.0 Practices, Morgan Kaufmann Pub, 2012.
3.	Kappelman, Leon, ed., The SIM guide to enterprise architecture, CRC Press, 2011.
4.	Muller, Hunter, The Transformational CIO: Leadership and Innovation Strategies for IT Executives in a Rapidly Changing World, Wiley, 2011.
5.	Lankhorst, Marc., Enterprise architecture at work: Modelling, communication and analysis, Springer, 2009.
6.	Goikoetxea, Ambrose, Enterprise Architectures and Digital Administration: Planning, Design and Assessment, World Scientific Publishing Company Incorporated, 2007.
7.	Ross, Jeanne W., Peter Weill, and David Robertson, Enterprise architecture as strategy: Creating a foundation for business execution, Harvard Business Press, 2006.
8.	Enterprise Architecture - http://msdn.microsoft.com/en-us/library/bb977468.aspx

- Updated SYL template in July 2017.