City University of Hong Kong
Course Syllabus

offered by Department of Information Systems
with effect from Semester A 2016 / 2017

Part I   Course Overview

Course Title: Information Technology Based Organization Transformation

Course Code: IS5743

Course Duration: One Semester (13 weeks)

Credit Units: 3

Level: P5

Medium of Instruction: English

Medium of Assessment: English

Prerequisites:
(Course Code and Title) Nil

Precursors:
(Course Code and Title) IS5313 Foundations of Information and Electronic Business Systems

Equivalent Courses:
(Course Code and Title) IS6643 Information Technology Based Organization Transformation

Exclusive Courses:
(Course Code and Title) Nil

Part II   Course Details

1.   Abstract

This course aims to:
- provide students with knowledge and experience relevant to organization transformation and business process management, and
- enable students to apply information technology (IT) to enable and facilitate organizational transformation.

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 key essence of process-oriented organizations and the evolution of management philosophy related to organization transformation.	25%			
2.	Apply a disciplined business process redesign methodology and propose IT-based redesign solutions.	30%	✓	✓	
3.	Deploy and implement enterprise systems to enable organization transformation.	20%			
4.	Manage changes due to IT-based organization transformation and identify the key success factors of organization transformation.	25%	✓	✓	
		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	
TLA1: Lecture	The lectures will cover such topics as environmental analyses for organization transformation, process-oriented organizations, business process reengineering (BPR), the role of IT in organization transformation, enterprise resource planning (ERP), enterprise systems, evolution of management philosophy in organization transformation, the Leavitt Diamond model of organization adaptation, BPR methodology, identification of business processes to be redesigned, scoping of a business process, business process modelling, analysis, and redesign, generic strategies for business process	✓	✓	✓	✓	

	redesign, principles and tactics for business process redesign, IT integration in the context of redesigned business processes, organization change management, and critical success factors for organization transformation.					
TLA2: Case Studies and Role-Play	Throughout the semester, students will apply and integrate what they learn through classroom discussions and readings into real-world mini-cases. On top of the mini-cases, students will be asked to submit written reports for three cases. To get in-depth understanding of the cases, role-playing exercises will be conducted in the class to simulate a scenario described in a real-world case. Students will take different roles in the exercises and key issues related to the successful implementation of organization transformation will be addressed in the exercises.		✓	✓	✓	
TLA3: Project	Business Process Reengineering is best learned by doing it. Therefore, the term project will be an exercise in reengineering. Students will work in a team of **4** members (3 members will be allowed in exceptional cases). You will choose your own partners. Each team should submit the group formation form by the end of **week 4**. **Students are encouraged to form your group ASAP.** Project teams can choose one of the two approaches: *Approach 1 – Redesign approach:* 1) analyze a currently existing organization process, and 2) seek to reengineer it (i.e., suggest a reengineered solution). *Approach 2 – Criticizing approach:* 1) identify a local (HK or Mainland) organization with a business process reengineering project that uses information technology to bring advantages to the organization, and 2) describe and critique the reengineering project, and provide an alternative solution to the project. Each team will write a report summarizing the findings and present their project in week 12. The due times of the three phase of the project are as follows: • *Project Proposal:* by **Week 6,** each team should hand in a **1~2 page** description of the company they intend to study and the study plan. • *Progress Report:* by **Week 9**, each team should hand in a **1~2 page** report summarizing the activities that have been conducted and the remaining activities and the problems faced in the BPR project. This report should be written in **bullet** form and it is **different** from the partial project report (i.e., you shall not include the contents of the sections of the final report that you've done).	✓	✓		✓	

	• *Project Presentation and PPT Slides:* by **Week 12** prior to the project presentations. The PPT slides are to be submitted in hard copy in class. In addition, the electronic version of the PPT slides should also be emailed to be instructor before **Week 12's class.**						

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		
Continuous Assessment: 60%						
AT1: Continuous Assessment and Self-Reflection The instructor encourages a two-way, interactive learning environment, thus students are expected to participate actively in class. The participation grade will be based on both in-class and online (Canvas) participation. The 20% of the grade allocated is not a gift, and will only be given to students who prepare for discussion and participate actively in the class. In particular, three components will be evaluated: • Attend class and participate in discussions to which you have something substantive to add, and make several significant contributions, i.e., insightful questions or comments. It is also desirable to draw from your experience that is relevant to a discussion. To ensure that the instructor knows who you are, you are recommended to bring a *nameplate* to every class. (about 12%) • Reflection journals: you will briefly summarize what you've learned from the class and report your self-reflection in the discussion forum in the Blackboard Canvas. Students are required to write at least 5 journals (one for each class). Normally students will focus on (1) the key messages you've learned and (2) some critical thinking about the topic of the class. (about 8%)	✓	✓	✓	✓	20%	
AT2: Case Reports To encourage students to better prepare for the case discussions, three case reports will be required to submit before the discussions. • Maybelline Case Report (5% of course grade) • Vicro Case Report (10% of course grade).		✓	✓	✓	15%	
AT3: Project The project will be marked using the following scheme: - Progress Report (5% of course grade) - Presentation (20% of course grade).	✓	✓		✓	25%	
Examination: 40% (duration: one 2-hour exam)						
AT4: Final Examination The final exam will be an open book exam. It will cover all readings assigned in the class, the lectures and the tutorials including the cases and examples mentioned in the class.	✓	✓	✓	✓	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-)	Adequate (C+, C, C-)	Marginal (D)	Failure (F)
Continuous Assessment	[CILOs 1, 2, 4] Participation in Lectures/Case Discussions (High weighting) • Attribute to contribute to class discussion actively by asking excellent questions and responding others' questions frequently and proactively • Ability to demonstrate the ability to solve many real problems by applying knowledge learned in the class • Capability to contribute to case discussions proactively and demonstrate deep understanding of the key issues involved in the cases	High	Significant	Moderate	Basic	Not even reaching marginal levels
	[CILOs 1, 2, 3, 4] Self-Reflection through Weekly Journals in the Canvas (Medium weighting) • Ability to demonstrate critical reflections in most of the weekly journals • Ability to demonstrate the ability to solve many real problems by applying knowledge learned in the class • Capability to address concerns and issues raised in others' weekly journals proactively	High	Significant	Moderate	Basic	Not even reaching marginal levels
Case	[CILOs 2, 3, 4] Case Reports (High weighting) • Capability to identify most the key issues involved in a case • Capability to provide an innovative solution to the problem in the case • Capability to provide rich critical thinking about the business case	High	Significant	Moderate	Basic	Not even reaching marginal levels
Project	[CILO 1] Introduction and Background (business environment, and justification of the choice of the process to be redesigned) (Medium weighting) • Ability to demonstrate a strong justification of	High	Significant	Moderate	Basic	Not even reaching marginal levels

		High	Significant	Moderate	Basic	Not even reaching marginal levels
	the need for organization transformation based on environmental analyses • Ability to provide rich, relevant material based on information from multiple sources • Ability to use well-structured and grammatically correct description					
	[CILO 2] Redesign of a Business Process (High weighting) • Ability to appropriately apply the 5-phases model to redesign the process • Ability to clearly describe the scope of the business process to be redesigned • Capability to adequately and appropriately apply the redesign principles and tactics • Ability to propose a well-justified, innovative redesign solution • Capability to propose alternative redesigns which are considered and ruled out convincingly	High	Significant	Moderate	Basic	Not even reaching marginal levels
	[CILO 4] Implementation (Medium weighting) • Capability to propose actionable, most suitable suggestions to facilitate the implementation of the project • Ability to identify the most relevant, key success factors of the project	High	Significant	Moderate	Basic	Not even reaching marginal levels
Final Examination	[CILO 1] Key concepts and management approaches to organization transformation (Low weighting) • Ability to effectively distinguish between radical redesign and incremental improvement of business processes • Ability to effectively identify needs for organization transformation based on an environmental analysis	High	Significant	Moderate	Basic	Not even reaching marginal levels

		High	Significant	Moderate	Basic	Not even reaching marginal levels
	• Ability to demonstrate evidence of deep understanding of the essence of business processes					
	[CILO 2, 3] Redesign a business process (High weighting) • Ability to effectively identify organizational needs for organizational transformation based on an internal analysis • Ability to identify the most suitable team members for the redesign project • Capability to set up the most appropriate goals and objectives for the redesign project • Ability to appropriately model a business process • Ability to effectively identify the key weaknesses of an existing business process • Ability to effectively identify the redesign principles and tactics that are most suitable to a redesign project and appropriately apply them • Capability to proposal a very suitable IT-based solution to achieve the redesign objectives	High	Significant	Moderate	Basic	Not even reaching marginal levels
	[CILO 4] Implementation of organization transformation (Medium weighting) • Capability to propose actionable, most suitable advice to facilitate the organization transformation by applying the Leavitt-diamond model • Ability to effectively identify the key success factors of a process redesign project	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.)

   Business Process; Business Process Reengineering (BPR); Workflow Management; Business Process Management (BPM); Enterprise Systems, Enterprise Resource Planning (ERP), the Leavitt Diamond Model; BPR Methodology; BPR Tool; Principles and Tactics for BPR; IT Integration; Change Management; and Critical Success Factors.

   Details:

   - Environmental analyses for organizational transformation: characteristics of today's changing business environments and organizational needs for transformation.
   - Process-oriented organizations: rationale and properties of business processes, need for process-oriented organizations.
   - IT for organization transformation: how IT changes business processes, innovative applications of IT in organizations, and role of IT for business process redesign.
   - Adaptation to organization transformation: the Leavitt Diamond Model.
   - Evolution of business process improvement: Total Quality Management (TQM), BPR, Time-based Competition, Incremental improvement vs. radical redesign of business process.
   - ERP system as a way of automation, integration, and reengineering of the processes.
   - Major elements of "traditional" ERP systems.
   - Expanded scope of Enterprise systems (ERP + Supply Chain Management + Customer Relationship Management + Business Intelligence)
   - Strategy of ERP implementation and Critical Successful Factors of ERP implementation
   - BPR Methodology: the 5-Phases Model, triggers for BPR, identification of business processes to be redesigned, BPR project mobilization, business process modelling, analysis, and redesign.
   - BPR Tools: activity decision flow diagrams for business process modeling, analysis, diagnosis, and redesign of business processing using BPR tools.
   - Business process redesign: generic strategies, principles and tactics, IT-based solutions for business process redesign.
   - BPR in Hong Kong: BPR in the banking industry of HK.
   - IT integration: IT platforms for business process integration.
   - Implementation of organization transformation: change management, people issues.
   - Redesign Supply Chain Processes: challenges in supply chain management, role of IS in supply chain management, the Outside-In approach to supply chain process redesign.
   - Critical Success Factors for BPR.

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.	Hestermann, C. and Woods, J., "Q&A: What ERP Is and What the Associated Terms Really Mean," *Gartner Research*, 18-Nov.-2009.
2.	Ganly, D., "Address Five Key Factors for Successful ERP Implementations," *Gartner Research*, 29-Aug.-2008.
3.	Hamel, G., "The Why, What, and How of Management Innovation," Harvard Business Review (84:2) 2006, pp 72-84.
4.	Johnson, L.K., "Successful Business Process Outsourcing," MIT Sloan Management Review (47:2) 2006, pp 5-6.

5.	Hammer, M., "Deep Change," Harvard Business Review (82:4) 2004, pp 84-93.
6.	S. Rivard, B. Aubert, M. Patry, G. Paré and H. Smith, Information Technology and Organizational Transformation, Elsevier, 2004.
7.	Zhang, L., Lee, M.K.O., Zhang, Z. and Banerjee, P., "Critical Success Factors of Enterprise Resource Planning Systems Implementation Success in China," *Proceedings of the 36th Hawaii International Conference on System Sciences*, 2003.
8.	El Sawy, O.A., Redesigning Enterprise Processes for e-Business, McGraw-Hill, 2001.
9.	Davenport, T.H., "Putting the Enterprise into the Enterprise System," *Harvard Business Review* (76:4) 1998, pp 121-131.
10.	Grover, V. and Malhotra, M.K., "Business process reengineering: A tutorial on the concept, evolution, method, technology and application, "Journal of Operations Management (15:3) 1997, pp 193-213.
11.	Hammer, M., "Reengineering Work: Don't Automate, Obliterate," Harvard Business Review (68:4) 1990, pp 104-112.
12.	Davenport, T.H. and Short, J.E., "The New Industrial Engineering: Information Technology and Business Process Redesign," MIT Sloan Management Review (31:4) 1990, pp 11-27.