City University of Hong Kong

Information on a Course
offered by the Department of Management Sciences
with effect from Semester A in 2012 / 2013

Part I

Course Title: E-logistics and Enterprise Resource Planning

Course Code: MS6233

Course Duration: One Semester

Credit Units: 3

Level: P6

Medium of Instruction: English

Prerequisites: Nil

Precursors: Nil

Equivalent Courses: Nil

Exclusive Courses: Nil

Part II

Course Aims

This course aims to:

- Provide students with an introduction to the concepts, the development, the implementation, and the applications of enterprise resource planning in logistics and supply chain management in the business sector.
- Develop students' computing and analytical skills in applying enterprise resource planning software to solve real business problems in areas such as logistics and supply chain management.
- Provide students with cutting-edge techniques to structure complex problem situations and solve business problems in areas such a logistics and supply chain management.

Course Intended Learning Outcomes (CILOs)

Upon successful completion of this course, students should be able to:

No.	CILOs	Weighting (if applicable)
1.	Explain the advantages and disadvantages of applying enterprise resource planning in a company.	15%
2.	Explore the impacts of applying enterprise resource planning in logistics and supply chain management of a company and evaluate critical success factors and major challenges faced in implementing enterprise resource planning in a company.	15%
3.	Analyse business processes in logistics from both multi-disciplinary and inter-disciplinary perspectives.	15%
4.	Solve real business problems in logistics and supply chain management by applying enterprise resource management skills.	15%
5.	Apply a prominent enterprise resource planning software package to solve problems in logistics and supply chain management.	40%

Teaching and Learning Activities (TLAs)

(Indicative of likely activities and tasks designed to facilitate students' achievement of the CILOs. Final details will be provided to students in their first week of attendance in this course)

CILO No.	TLAs
1, 2, 3, 4, 5.	**1. Lectures:** • Concepts, knowledge and problem solving skills relevant to the applications of e-logistics management, enterprise resource management, and supply chain management in the business sector are discussed and explained.
2, 4, 5.	**2. SAP Laboratories:** • Students learn navigations of SAP software through lecturer's demonstrations. • Students apply SAP enterprise resource planning software to solve logistics and supply chain problems through performing computer exercises and assignments.
2, 3, 4.	**3. Group Discussions**: • Students listen to lectures and respond to comprehension checks by reporting back to class after brief small group discussions. • Students work in groups to research and discuss the latest issues and trends in applying enterprise resource planning software to solve problems in logistics and supply chain management.

Constructive Alignment of CILOs and TLAs

	TLA 1: Lectures	TLA 2: SAP Laboratories	TLA 3: Group Discussions
CILO 1	✓		
CILO 2	✓	✓	✓
CILO 3	✓		✓
CILO 4	✓	✓	✓
CILO 5	✓	✓	

Assessment Tasks

(Indicative of likely activities and tasks designed to assess how well the students achieve the CILOs. Final details will be provided to students in their first week of attendance in this course)

CILO No.	Types of Assessment Tasks (ATs)	Assessment Details	Weighting (if applicable)
4, 5.	**1. Computer assignments**	Students are required to do two computer assignments to solve problems regarding production planning, sales and distributions, and procurement in a company.	20%
2, 4, 5.	**2. Laboratory test**	Students are required to do one laboratory test to solve problems regarding production planning, sales and distributions, and procurement in a company.	30%
1, 2, 3, 4, 5.	**3. Written examination**	This covers all topics in lectures and laboratories.	50%

Constructive Alignment of CILOs and Assessment Tasks

	AT1: Computer Assignments	AT2: Laboratory Test	AT3: Written Examination
CILO 1			✓
CILO 2		✓	✓
CILO 3			✓
CILO 4	✓	✓	✓
CILO 5	✓	✓	✓

Grading of Student Achievement:

Refer to Grading of Courses in the Academic Regulations for Taught Postgraduate Degrees.

AT1: Computer Assignments

Letter Grade	Grade Point	Grade Definitions	
A+ A A-	4.3 4.0 3.7	Excellent	Strong evidence of knowing how to apply enterprise resource planning software in performing business processes in logistics and supply chain management.
B+ B B-	3.3 3.0 2.7	Good	Evidence of knowing how to apply enterprise resource planning software in performing business processes in logistics and supply chain management.
C+ C C-	2.3 2.0 1.7	Adequate	Some evidence of knowing how to apply enterprise resource planning software in performing business processes in logistics and supply chain management.
D	1.0	Marginal	Sufficient familiarity with the subject matter to enable the student to progress.
F	0.0	Failure	Little evidence of familiarity with the subject matter.

AT2: Laboratory Test

Letter Grade	Grade Point	Grade Definitions	
A+ A A-	4.3 4.0 3.7	Excellent	Strong evidence of knowing how to apply enterprise resource planning software in performing business processes in logistics and supply chain management.
B+ B B-	3.3 3.0 2.7	Good	Evidence of knowing how to apply enterprise resource planning software in performing business processes in logistics and supply chain management.
C+ C C-	2.3 2.0 1.7	Adequate	Some evidence of knowing how to apply enterprise resource planning software in performing business processes in logistics and supply chain management.
D	1.0	Marginal	Sufficient familiarity with the subject matter to enable the student to progress.
F	0.0	Failure	Little evidence of familiarity with the subject matter.

AT3: Written Examination

Letter Grade	Grade Point	Grade Definitions	
A+ A A-	4.3 4.0 3.7	Excellent	Strong evidence of original thinking; good organization, capacity to analyse and synthesize; superior grasp of subject matter; evidence of extensive knowledge base.
B+ B B-	3.3 3.0 2.7	Good	Evidence of grasp of subject, some evidence of critical capacity and analytic ability; reasonable understanding of issues; evidence of familiarity with literature.
C+ C C-	2.3 2.0 1.7	Adequate	Student who is profiting from the university experience; understanding of the subject; ability to develop solutions to simple problems in the material.
D	1.0	Marginal	Sufficient familiarity with the subject matter to enable the student to progress.
F	0.0	Failure	Little evidence of familiarity with the subject matter; weakness in critical and analytic skills; limited or irrelevant use of literature.

Part III

Keyword Syllabus

1. Introduction to E-Logistics and Enterprise Resource Planning

From material resources planning (MRP) to enterprise resource planning (ERP). Impacts of information technology to a company. Integrated view of business processes. Functions and characteristics of enterprise systems.

2. Materials Management

Understanding the materials management processes. Common materials management problems. Business process in purchasing. Functions and tools for managing inventory.

3. Sales and Distribution

Common sales and distribution problems. Understanding the sales and distribution processes. Sales and distribution functionality. Sales order management processes.

4. Production Planning and Management

Sales and operations planning. Demand management. Master production scheduling and material requirement planning. Production order execution and control. Manufacturing execution systems.

5. Enterprise Resource Planning Implementation Issues

Business process reengineering. ERP-driven business process change. Process modelling tool. Challenges of implementing enterprise systems. Evaluation and selection of enterprise systems. Managing the implementation projects.

6. Advanced planning and scheduling in supply chain Management

Understanding and solving logistics and supply chain problems. Advanced Planner and Scheduler.

Recommended Reading:

Books

- D Olson, S Kesharwani (2010) Enterprise Information Systems. World Scientific
- M Murray (2007) Understanding the SAP Logistics Information System. Galileo Press
- M Hoppe (2007) Sales and Inventory Planning with SAP APO. Galileo Press
- J T Dickersbach, G Keller, K Weihrauch (2007) Production Planning and Control with SAP. Galileo Press
- J. Kallarath, T.I. Maindl (2006) Real Optimization with SAP APO. Springer

Journal articles

- Koh SCL, Gunasekaran A, Goodman T (2011) Drivers, barriers and critical success factors for ERPII implementation in supply chains: A critical analysis, *Journal of Strategic Information Systems*, Vol. 20, pp. 385-402.
- Bose I, Ral R, Ye A (2008) ERP and SCM systems integration: The case of a valve manufacturer in China, *Information and Management*, Vol. 45, pp. 233-241.
- Bradley J (2008) Management based critical success factors in the implementation of Enterprise Resource Planning systems, *International Journal of Accounting Information System*, Vol. 9, pp. 175-200.
- Stefanou CJ and Revanoglou A (2006) ERP integration in a healthcare environment: a case study. *Journal of Enterprise Information Management*, Vol. 19, No. 1, pp. 115 – 130.
- Gupta M, Kohli A (2006) Enterprise resource planning systems and its implications for operations function, *Technovation*, Vol. 26, pp. 687-696.
- Yusuf Y, Gunasekaran A, Wu C (2006) Implementation of enterprise resource planning in China, *Technovation*, Vol. 26, pp. 1324-1336.

Online Resources:

- History of SAP http://www.sapfans.com/sapfans/saphist.htm
- Introduction to SAP R/3 http://www.sapfans.com/sapfans/sapr3con.htm
- SAP Help Portal http://help.sap.com/
- SAP AG http://www.sap.com/
- FedEx Co.: http://www.fedex.com/us/ebusiness/
- UPS: http://www.upslogistics.com/services/eLogistics.html
- Logistics industry's electronic marketplace: http://www.elogistics.com/
- SAP Online Documentation: SAP Library http://help.sap.com/saphelp_46c/helpdata/en/73/69f5c755bb11d189680000e829fbbd/frameset.htm