City University of Hong Kong
Course Syllabus

offered by Department of Systems Engineering and Engineering Management
with effect from Semester A 2018/19

Part I Course Overview

Course Title:	**Industrial Engineering and Management of Modern Enterprises**
Course Code:	**GE2319**
Course Duration:	**One Semester**
Credit Units:	**3**
Level:	**B2**
Proposed Area: *(for GE courses only)*	[ ] Arts and Humanities [2] Study of Societies, Social and Business Organisations [1] Science and Technology
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)*	**Nil**
Exclusive Courses: *(Course Code and Title)*	**Nil**

Part II Course Details

1. Abstract

(A 150-word description about the course)

The course will first introduce how a modern enterprise is structured and managed. Next, it will raise the question where it all originated - taking the students back in time to search for the roots and pioneers of modern management thoughts. Students will learn about how these IE and management gurus influenced and shaped modern industrial and enterprise management. Finally, this knowledge will help students to understand better, the roles of IE and management in today's organizations and to recognize the importance of creative and innovative thinking in modern enterprise management.

Students' learning in this course will be enriched by company visits and guest lectures from the IE and management professionals and eminent industrialists.

The course aims to introduce the evolution of industrial engineering (IE) and modern management concepts and practices; and the enabling role they have played in the world's industrial and economic development since the turn of the last century. Students will learn about the major gurus and milestones in the evolution of IE and management practices and how their creative and innovative thinking shaped the management of modern enterprises. In addition, students will be acquainted with the work and contributions of IE and management professionals in today's organizations.

Motivations

Many university students today, regardless of whether they come from social work, media studies, applied sciences, mathematics or engineering colleges, let alone those from business schools, aspire to a career in modern enterprises and eventually a position in management echelon. Yet, many youngsters are quite ignorant of how a modern enterprise functions and the role industrial engineering (IE) has played in the shaping of modern enterprise management. This GE course is suitable for students who want to find out how and why modern enterprises are managed the way they are.

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 organization and management of today's industrial and business enterprises	10%			
2.	Outline how modern management theories and practices evolved from IE in the last 100 years	15%		√	
3.	Recognize the importance of creative and innovative thinking in modern enterprise management	15%		√	
4.	Explain the contributions and significance of the key IE and management gurus in the evolution of modern management practices	20%			
5.	Elaborate and discuss the roles of IE and management in today's organizations	25%			
6.	Communicate clearly the results of individual assignment	15%			
		100%			

** If weighting is assigned to CILOs, they should add up to 100%.*

 # Please specify the alignment of CILOs to the Gateway Education Programme Intended Learning outcomes (PILOs) in Section A of Annex.

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	
Large class activities (lectures/ seminars/ presentations)	The TLAs are made up of a mixture of Large class, Small group discussions and Out-of-classroom activities. In addition, company visits will be organized; IE and management professionals and eminent industrialists will be invited as guest lecturers to enrich students' learning particularly of CILO No. 3 and 4. Students' learning on each lecture or seminar topic will be complemented by selected case studies and follow-up group discussions. Tutorials provide the forum for case analyses, topical discussions and interactions among students and tutor.	√	√	√	√	√	√	2 hrs/wk
Small class activities (case studies /group discussion)	The subject matter of this GE course calls for interdisciplinary learning among students of diverse backgrounds. Group discussion, case studies and individual projects in the course TLAs ensure that there will be extensive use of engaging pedagogies that emphasize the development of generic skills in, problem solving, and communication.	√	√	√	√	√	√	1 hr/wk
Consultation hours	1 hour per week will be scheduled for answering questions from students whom can meet the teaching staff on an individual or small group basis in staff's office.							1 hr/wk

Notes: Complementary out-of-class activities (research/ directed readings/ company visits) to enhance students' achievements of CILO 1-5.

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		
Continuous Assessment: 50%								
Individual Assignments (two sets)	√	√	√	√	√	√	20%	
Individual Term Paper	√	√	√	√	√	√	30%	
Examination: 50% (duration: 2 hours)								
							100%	

**The weightings should add up to 100%.*

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)
1. Individual Assignments (two sets)	The assignments will be assessed based upon the students' understanding of class materials.	High	Significant	Moderate	Basic	Not even reaching marginal levels
2. Individual Term Paper	The term paper will be assessed based upon its clarity of topic definition, relevance, depth of analysis and discussion, evidence of literature support, and overall presentation.	High	Significant	Moderate	Basic	Not even reaching marginal levels
3. Final Examination (two-hour)	The students will be assessed based upon students' understanding of the course materials and their performance during the exam	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.)

- Industrialization, modern industrial and business enterprises
- Operations and processes, organization and management, efficiency and productivity
- Industrial engineering and management thoughts and gurus
- Modern enterprise and management practice

Information about the tentative weekly schedule is given in the Annex.

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.)

Nil.

2.2. Additional Readings

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

Text(s):

1.	Zandin, Kjell B, Maynard's IE Handbook, McGraw-Hill, 2001
2.	Wren Daniel A, Bedeian Arthur G, The Evolution of Management Thought, John Wiley, 2009
3.	Wren, Daniel A, The history of management thought, John Wiley, 2005

Online Resources:

1.	Wikipedia - Industrial Engineering *http://en.wikipedia.org/wiki/Industrial_engineering*
2.	Martin-Vega, Louis A, The purpose and evolution of IE *http://knol.google.com/k/the-purpose-and-evolution-of-industrial-engineering#*
3.	The evolution of management theory, *http://74.125.153.132/search?q=cache:LnHc8bIUWswJ:highered.mcgraw-hill.com/sites/dl/free/0070893721/38909/jones1_sample_chap2.pdf+evolution+of+management+thoughts&cd=12&hl=en&ct=clnk&gl=hk*

Annex
(for GE courses only)

A. Please specify the Gateway Education Programme Intended Learning Outcomes (PILOs) that the course is aligned to and relate them to the CILOs stated in Part II, Section 2 of this form:

GE PILO	**Please indicate which CILO(s) is/are related to this PILO, if any** ***(can be more than one CILOs in each PILO)***
PILO 1: Demonstrate the capacity for self-directed learning	CILOs 1-5
PILO 2: Explain the basic methodologies and techniques of inquiry of the arts and humanities, social sciences, business, and science and technology	
PILO 3: Demonstrate critical thinking skills	
PILO 4: Interpret information and numerical data	CILOs 4 and 5
PILO 5: Produce structured, well-organised and fluent text	CILO 6
PILO 6: Demonstrate effective oral communication skills	CILO 6
PILO 7: Demonstrate an ability to work effectively in a team	CILO 6
PILO 8: Recognise important characteristics of their own culture(s) and at least one other culture, and their impact on global issues	
PILO 9: Value ethical and socially responsible actions	
PILO 10: Demonstrate the attitude and/or ability to accomplish discovery and/or innovation	

GE course leaders should cover the mandatory PILOs for the GE area (Area 1: Arts and Humanities; Area 2: Study of Societies, Social and Business Organisations; Area 3: Science and Technology) for which they have classified their course; for quality assurance purposes, they are advised to carefully consider if it is beneficial to claim any coverage of additional PILOs. General advice would be to restrict PILOs to only the essential ones. (Please refer to the curricular mapping of GE programme: http://www.cityu.edu.hk/edge/ge/faculty/curricular_mapping.htm.)

B. Please select an assessment task for collecting evidence of student achievement for quality assurance purposes. Please retain at least one sample of student achievement across a period of three years.

Selected Assessment Task
Individual Assignments and Term Paper / Final Examination.