City University of Hong Kong Course Syllabus

offered by Department of Marketing with effect from Semester B in 2019/20

Part I Course Over	view
Course Title:	Customer Analytics
Course Code:	MKT4636
Course Duration:	One Semester
Credit Units:	_3
Level:	B4 Arts and Humanities
Proposed Area: (for GE courses only)	Study of Societies, Social and Business Organisations Science and Technology
Medium of Instruction:	English
Medium of Assessment:	English
Prerequisites: (Course Code and Title)	CB2601 Marketing
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

Nowadays data are expanding faster than ever and we are facing Big Data challenges. This course will equip students with key data analytic skills to analyse customer data and managerial skills to recommend more profitable marketing actions (4Ps) based on the insights from data. Students will work in a group to analyse a real customer data and solve a real marketing problem. Each lecture will present a friendly introduction of concepts and theories behind each analytic tool, followed by a demonstration on how to apply the tool (using SPSS and Excel) to a real-world dataset in order to solve a marketing problem. More topics at the frontier of today's marketing scene, such as machine learning and artificial intelligence, will also be discussed.

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*	Discov	-	
		(if applicable)	curricu	ılum rel	lated
			learnin	g outco	omes
			(please	tick	where
			approp	riate)	
			A1	A2	A3
1.	Carefully observe and identify theory and concepts associated with using database to enhance marketing programmes and build stronger relationship with customers and/or suppliers.	20%	✓		
2.	Develop skills to summarize, visualize and analyze customer data so as to make sound marketing decisions.	30%	√	✓	
3.	Create and design data-centric marketing programmes based on the insights from data that can be integrated with company's marketing mix programmes (e.g., 4Ps).	30%	√		√
4.	Work productively as part of a team, and in particular, communicate and coordinate team tasks effectively.	20%		√	√
* If w/	eighting is assigned to CILOs, they should add up to 100%	100%			

^{*} If weighting is assigned to CILOs, they should add up to 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.

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

3. Teaching and Learning Activities (TLAs)

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

	CIL	CILO No.		Hours/week	
					(if applicable)
	1	2	3	4	
concepts and marketing	, V	\checkmark			3 hrs/week
_					
ussions, computer-based	1 🗸	✓	√	√	1 hrs/week
se analyses.					
complete a group research	1	✓	√	✓	3 hrs for 2
y marketing analytics to	ı				weeks
industry. They will presen	t				
class.					
	ussions, computer-based se analyses. complete a group research y marketing analytics to a	se analyses. complete a group research y marketing analytics to a findustry. They will present	ussions, computer-based see analyses. complete a group research y marketing analytics to a findustry. They will present	concepts and marketing ussions, computer-based see analyses. complete a group research y marketing analytics to a lindustry. They will present	concepts and marketing ussions, computer-based see analyses. complete a group research y marketing analytics to a industry. They will present

4. Assessment Tasks/Activities (ATs)

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

Assessment Tasks/Activities		LO N	0.		Weighting*	Remarks
	1	2	3	4		
Continuous Assessment: 70 %						
<u>Class Discussion & Participation</u> Students need to come to class and participate actively in class discussions and exercises designed to facilitate their understanding of knowledge covered in class.	√	√			20%	
Group Assignments Students are expected to work in a group to complete their assignments, including case-study analysis and data analysis.	√	√	√	✓	15%	
Group Project and Presentation Students will be working on a group project in which they analyse a real dataset and make actionable marketing suggestions. Students need to form groups at the beginning of the semester and submit a progress report and at the end of the semester present their findings to the class.			√	√	35%	
Examination: 30% (duration: 2 hours)						
Examination Students will be assessed via written and/or data analysis their understanding of concepts covered in class and their ability to apply their knowledge to analyse a real data.	✓		✓		1000/	
* The weightings should add up to 100%.					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 Good Fair		Fair	Marginal	Failure
1		(A+, A, A-)	(B+, B, B-)	(C+, C, C-)	(D)	(F)
1. Class Discussion & Participation	Command of course materials, ability to raise question and think critically, active level of class participation	Show excellent command of all aspects of the course, with the ability to describe concepts and applications in customer analytics.	1. Show good coverage of most aspects of the course, with the ability to describe main concepts and applications in customer analytics.	1. Show fair command of all aspects of the course, with the ability to describe important concepts and applications in customer analytics.	1. Show marginal command of all aspects of the course, with the ability to describe basic concepts and applications in customer analytics.	Show poor command of all aspects of the course. Demonstrate poor ability to raise question and think
		Demonstrate excellent ability to raise question and think critically. Show excellent problem solving and case analysis skills.	 Demonstrate good ability to raise question and think critically. Show good problem solving and case analysis skills. 	Demonstrate acceptable ability to raise question and think critically. Show acceptable problem solving and case analysis skills.	Demonstrate marginal ability to raise question and think critically. Show acceptable problem solving and case analysis skills.	critically. 3. Show little problem solving and case analysis skills.
2. Group Assignments	Command of concepts and applications in customer analytics, ability to apply	Show excellent command of concepts and applications in customer analytics.	Show good command of concepts and applications in customer analytics.	Show acceptable command of concepts and applications in customer analytics.	Show marginal command of concepts and applications in customer analytics.	Show poor command of concepts and applications in customer analytics.
	course content in practical situations and to assess the quality of customer analytics applications by firms, attitude to team work, writing skills	Demonstrate excellent ability to apply course content in practical situations and to assess the quality of customer analytics applications by firms. Enthusiastic, contribute	 Demonstrate good ability to apply course content in practical situations and to assess the quality of customer analytics applications by firms. Active, contribute to 	Able to apply course content in practical situations and to assess the quality of customer analytics applications by firms. Active when prompt, contribute to team	Able to apply some course content in practical situations and to assess the quality of customer analytics applications by firms. Occasionally active when urged.	2. Not able to apply course content in practical situations and to assess the quality of customer analytics applications by firms.
		to team work proactively.	team work keenly. 4. Good writing skills.	work reactively. 4. Acceptable writing	4. Marginal writing skills.	3. Not active.
		4. Excellent writing skills.	_	skills.		4. Poor writing skills.

3. Group Project and Presentation	Tackle a real marketing problem and provide marketing recommendations based on analysis of customer data	 Show excellent command of all aspects of the whole presented content, and thorough understanding of allocated part. Demonstrate excellent ability of interpretation and integration. Strong evidence of original thinking with high degree of creativity. Enthusiastic, contribute to team work proactively in presentation session. 	Show good knowledge of most aspects of the whole presented content, and deep understanding of allocated part. Demonstrate good ability of interpretation and integration. Good evidence of original thinking with degree of creativity. Active, contribute to team work keenly in presentation session.	1. Demonstrate acceptable command of all aspects of the whole presented content, and reasonable understanding of allocated part. 2. Demonstrate fair ability of interpretation and integration. 3. Fair evidence of original thinking. 4. Active when prompt, contribute to team work reactively in presentation session.	Show marginal command of all aspects of the whole presented content, and basic understanding of allocated part. Show marginal ability of interpretation and integration. Poor evidence of original thinking. Occasionally active when urged in presentation session.	1. Show poor command of the whole presented content, and poor understanding of allocated part. 2. Show poor ability of interpretation and integration. 3. No evidence of original thinking. 4. Not active when urged in presentation session.
4. Examination	Command of analyzing the customers, competitors and other business environments independently, ability to recognize the marketing concepts and their applications, ability to demonstrate managerial and analytical skills to current marketing problems and issues	 Show excellent command of analyzing the customers, competitors and other business environments independently. Able to recognize all of the marketing concepts and their applications. Demonstrate excellent managerial and analytical skills to current marketing problems and issues. 	Show good command of analyzing the customers, competitors and other business environments independently. Able to recognize most of the marketing concepts and their applications. Demonstrate good managerial and analytical skills to current marketing problems and issues.	1. Show acceptable command of analyzing the customers, competitors and other business environments independently. 2. Able to recognize some of the marketing concepts and their applications. 3. Demonstrate acceptable managerial and analytical skills to current marketing problems and issues.	Show marginal command of analyzing the customers, competitors and other business environments independently. Able to recognize a few marketing concepts and their applications. Demonstrate marginal managerial and analytical skills to current marketing problems and issues.	1. Show poor command of analyzing the customers, competitors and other business environments independently. 2. Not able to recognize marketing concepts and their applications. 3. Demonstrate poor managerial and analytical skills to current marketing problems and issues.

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

1. Keyword Syllabus

Customer analytics, customer data, customer relationship management, customer lifetime value, RFM, regressions, market segmentation and targeting, personalized pricing, artificial intelligence, social media marketing, mobile marketing, field experiments.

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. Marketing Analytics, by Wayne L. Winston, published by Wiley.

2.2 Additional Readings

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

- 1. Strategic Database Marketing, by Arthur M. Hughes, published by McGraw-Hill.
- 2. Data Mining for Business Analytics, by Galit Shmueli, Peter C. Bruce, and Nitin R. Patel, published by Wiley.