

**City University of Hong Kong**

**Information on a Course  
offered by Department of Information Systems  
with effect from Semester A in 2014 / 2015**

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**Part I**

Course Title:	Business Intelligence Applications
Course Code:	IS6321
Course Duration:	One Semester
No. of Credit Units:	3
Level:	P6
Medium of Instruction:	English
Prerequisites:	Nil
Precursors:	Nil
Equivalent Courses:	Nil
Exclusive Courses:	Nil

**Part II**

**1. Course Aims**

This course aims to develop students' knowledge and skills to carry out real-world business intelligence tasks professionally by emphasising the use of analytics tools and the management of these tools.

## 2. Course Intended Learning Outcomes (CILOs)

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

No.	CILOs	Weighting	PILO (MScISM)
1.	Describe the basic concepts of business intelligence and analytics to support business operations and effectively use emerging technologies for business purposes.	2	P1
2.	Design and apply the analytical techniques and technologies of business intelligence and analytics to find solutions for local and international business problems.	3	P3
3.	Manage analytical tools and big data for effective and efficient discovery of business intelligence in a technology-driven economy.	3	P2, P3
4.	Demonstrate good communication and interpersonal skills in proposing and presenting appropriate strategies for business intelligence.	1	P4

(3: Relatively most focused ILOs; 2: moderately focused ILOs; 1: less focused ILOs)

## 3. 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)*

Seminar: 3 hours per week (preferably to be conducted in computer lab)

TLA1. Lecture: Concepts of business operation support and intelligence and its web-based extensions to solve business problems, and the design, implementation, integration, and management of business intelligence systems for real-world business applications are explained by instructor.

TLA2. Case Studies: The business intelligence-related problems and the specific applications of proven problem solving techniques as well as cutting-edge technologies for business support and intelligence concepts are discussed and presented to the fellow students.

TLA3. Demonstrations and hands-on exercises: Demonstrations and practices of application of business data analytical techniques to business problems.

TLA4. Practical: Developing the hands-on skills for solving business problems by adopting the business intelligence skills just taught.

TLA5. On-Line Discussion: It is a means of self reflection and sharing concepts, techniques, and methods for business intelligence issues among students within or after formal classes.

CILO No.	TLA1	TLA2	TLA3	TLA4	TLA5	Hours/week (if applicable)
CILO 1	2	1			1	-
CILO 2	2	2	1	1	1	-
CILO 3	1	2	2	1		-
CILO 4		1	1	1	1	-

(1: Indirectly Supporting ILO; 2: Directly Supporting ILO)

#### 4. Assessment Tasks/Activities

*(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)*

AT1. Seminar Participation and Exercises (20%): Each seminar consists of lecture, exercises, small group discussions, self reflection, or student presentations to assess students' understanding of the chosen topics and their abilities to apply their skills.

AT2. Group Project (40%): A group project, which includes a project report and presentation, will be allocated to let students practise on the skills acquired.

AT3. Examination (40%, one 2-hour exam): A written examination is developed to assess student's competence level of the taught subjects.

**\*\* Students are required to pass both coursework and examination in order to secure an overall pass in this course.\*\***

CILO No.	AT1 (20%)	AT2 (40%)	AT3 (40%)	Weighting (if applicable)	Remarks
CILO 1	1		2	-	-
CILO 2	2	1	2	-	-
CILO 3	2	2	2	-	-
CILO 4		2		-	-

(1: ILO moderately assessed by AT; 2: ILO heavily assessed by AT)

**5. Grading of Student Achievement:** Refer to Grading of Courses in the Academic Regulations for Taught Postgraduate Degrees.

Grading pattern: Standard (A+, A, A- ... C-, D, F)

ILO	Excellent	Good	Adequate	Marginal
CILO1	Accurately and profoundly describe all important requirements and all key concepts for business intelligence and analytics; effectively compare and discriminate among the key concepts;	Accurately and profoundly describe several important requirements and all key concepts of business intelligence and analytics; effectively discriminate among the key concepts;	Accurately describe some important requirements and most key concepts of business intelligence and analytics; reasonable discriminate among the key concepts;	Accurately describe few important requirements and some key concepts of business intelligence and analytics; minimal discriminating among the key concepts;
CILO2	Reasonably and effectively formulate and discriminate the business intelligence analytical techniques and technologies to solve given business problems;	Reasonably formulate and discriminate the business intelligence analytical techniques and technologies to solve given business problems;	Reasonably formulate and discriminate the major business intelligence analytical techniques to solve given business problems;	Reasonably formulate and discriminate the most important business intelligence analytical techniques to solve given business problems;
CILO3	Effectively and accurately propose a comprehensive management plan and methodology on how intelligence data could be collected and analyzed to improve the outcomes of the business initiatives;	Effectively propose with a reasonable management plan and methodology on how intelligence data could be collected and analyzed to improve the outcomes of the business initiatives;	Propose a management plan and methodology on how intelligence data could be collected and analyzed to improve the outcomes of the business initiatives;	Propose a minimal management plan and methodology on how intelligence data could be collected and analyzed to improve the outcomes of the business initiatives;
CILO4	show well-rounded knowledge in identifying most appropriate existing technique for respective system design and implementation problems;	show well-rounded knowledge in identifying some appropriate existing technique for respective system design and implementation problems;	show reasonable degree of knowledge in identifying some reasonable existing technique for respective system design and implementation problems;	show limited knowledge in identifying necessary existing technique for respective system design and implementation problems;

## Part III

### Keyword Syllabus

#### Introduction to Business Intelligence

- What is business intelligence and analytics, and how to apply and manage analytics tools to achieve desirable business outcomes?

#### Business Intelligence Data Analytics

- How can we collect business big data for analysis purposes?
- What are analytics for web, finance, marketing, mobile and social, and how are they applied?
- How to identify business intelligence metrics and how to measure them?

#### Emerging Trends and Concerns of Business Intelligence

- How have these technologies been enlarged by the various online and offline platforms?
- What are the cutting-edge technologies for business support and applications?

### Recommended Reading

#### Text(s)

Andrew W. Lo, Hedge Funds: An Analytic Perspective, Princeton University Press, 2010.

Arvind Sathi, Big Data Analytics: Disruptive Technologies for Changing the Game, Mc Press, 2013.

Avinash Kaushik, Web Analytics 2.0: The Art of Online Accountability and Science of Customer Centricity, Sybex, 2009.

Ben Waber, People Analytics, FT Press, 2013.

Eric Siegel, Predictive Analytics, Wiley, 2013.

Kim Dushinski, The Mobile Marketing Handbook, 2/e, Information Today, Inc., 2012.

Paul W. Farris, Neil T. Bendle, Philip E. Pfeifer and David J. Reibstein, Marketing Metrics – The Definitive Guide to Measuring Marketing Performance, 1/e Wharton School Publishing, 2010.

Thomas H. Davenport, Enterprise Analytics: Optimize Performance, Process, and Decisions Through Big Data, FT Press, 2012.

Tim Ash, Rich Page and Maura Ginty, Landing Page Optimization – The Definitive Guide to Testing and Tuning for Conversions, 1/e, Sybex, 2012.

Victoria Lemieux, Financial Analysis and Risk Management: Data Governance, Analytics and Life Cycle Management, Springer, 2012.

### Online Resources

Course reading materials will be augmented by articles from journals, whitepapers and other materials available on-line.