HONG KONG BAPTIST UNIVERSITY
COURSE OUTLINE

1. COURSE TITLE

Web Intelligence and Its Applications

2. COURSE CODE

COMP7630

3. NO. OF UNITS

3 Units

4. OFFERING DEPARTMENT

MSc in Information Technology Management

5. PREREQUISITES

Nil

6. MEDIUM OF INSTRUCTION

English

7. AIMS & OBJECTIVES

To introduce the fundamental concepts as well as practical applications of Web Intelligence (WI) which combines contemporary Artificial Intelligence and advanced Information Technology in the context of Web-empowered systems, environments, and activities. To introduce some advanced topics of Web Intelligence as well as their possible impact to different sectors of the society. Students after taking this subject should be able to 1) identify the possible impact of Web Intelligence in the society, and 2) apply WI related techniques to advance existing Web-based systems and on-line business platforms.

8. COURSE CONTENT

I. Introduction to Web Intelligence (WI) Concepts and Applications

II. WI Methodologies and Algorithms
- Distributed Problem Solving
- Autonomy-Oriented Computing
- Web Information Filtering and Retrieval

- Web Mining and Farming
- Social Networks Mining and Social Intelligence
- Sentiment and Opinion Mining

III. Applications of WI technologies
- Autonomous Knowledge and Information Agents
- Personalization
- Collaborative filtering

IV. Advance Topics

9. COURSE INTENDED LEARNING OUTCOMES (CILOs)

CILO	By the end of the course, students should be able to:
CILO 1	Describe the concepts and applications of contemporary Artificial Intelligence and advanced Information Technology in the context of Web empowered systems, environments, and activities
CILO 2	Explain the techniques and issues central to the development of WI computing systems
CILO 3	Explain the practical applications of Web intelligence
CILO 4	Solve advanced technical problems in generic Web environment
CILO 5	Apply specific methods and techniques in a number of Intelligent Web applications
CILO 6	Develop team spirit in tackling challenging problem in Web

10. TEACHING & LEARNING ACTIVITIES (TLAs)

CILO alignment	Type of TLA
1-3	Student will learn the concepts from lecture
4-5	Student will achieve the outcomes via assignment
4-5	Student will achieve the outcomes via guided laboratory
4-6	Student will achieve the outcomes via group project

11. ASSESSMENT METHODS (AMs)

Type of Assessment Methods	Weighting	CILOs to be addressed	Description of Assessment Tasks
Continuous Assessment	40 %	4-6	Assignments and Labs will be used to consolidate their knowledge and develop their skills in Web intelligence. Group project or term paper will

			further strength their understanding and problem solving skills.
Examination	60 %	1-5	Final Examination questions are designed to evaluate how far students have achieved their intended learning outcomes. Analysis based questions will be used to assess the understanding of WI computing systems. Problem solving questions will be used to assess the students' ability in tackling Web applications.

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