



Course Code MBA-737	Course Title Knowledge Management	ECTS Credits 7.5
Department School of Business	Semester Fall, Spring, Summer	Prerequisites None
Type of Course Elective	Field MIS	Language of Instruction English
Level of Course 2 nd Cycle	Year of Study 1 st or 2 nd	Lecturer(s) Dr Neophytos Karamanos
Mode of Delivery Face-to-face	Work Placement N/A	Co-requisites None
Recommended Optional Programme Components: N/A		

Objectives of the Course:

The main objectives of the course are:

- Appreciate the forces driving the growth of knowledge management today.
- Distinguish between data, information and knowledge.
- List the main types of knowledge.
- Understand the various components of knowledge management solutions including processes, mechanisms and technologies.
- Understand how knowledge management impacts organizations.
- List the factors influencing the application of knowledge management in organizations.
- Perform a knowledge management organization assessment.
- List and have a high level understanding of the main technologies and mechanisms employed in KM systems.
- Describe a number of examples of knowledge management systems in the areas of knowledge discovery, knowledge capture, knowledge sharing and knowledge application.

Learning Outcomes:

After completion of the course students are expected to be able to:

1. **Assess the role of knowledge management in organizations** (students should be able to discuss and explain the key role of knowledge in an organization along with the forces driving its growth today).
2. **Formulate a suitable knowledge strategy to support the overall organization strategy** (using a contingency view of knowledge management and a specific

methodology worked in class, the students should be able to derive a prioritized list of the needed knowledge management processes in an organization).

3. **Perform a knowledge management organization assessment** (students should be able to assess the extent of the current utilization of knowledge management processes and systems in an organization and unveil knowledge management gaps which need to be filled).
4. **Assess the various components of knowledge management systems and propose suitable solutions to satisfy organization needs** (students should be able to discuss the various components of knowledge management solutions such as systems, mechanisms and technologies and propose appropriate solutions in order to meet the needs of an organization. Students should also be able to discuss the challenges that could be faced when implementing knowledge management systems along with ways to overcome them).
5. **Demonstrate how knowledge management solutions can impact organizational performance** (students should be able to explain the impact of such solutions on employees, processes, products and general organizational performance).
6. **Describe a number of real life knowledge management systems encountered in organizations** (a number of systems are discussed in the areas of knowledge discovery, knowledge capture, knowledge sharing and knowledge application).

Course Contents:

- 1.0 Introducing Knowledge Management
 - 1.1 Motivation for Knowledge Management (KM)
 - 1.2 Forces driving KM
 - 1.3 Knowledge management systems
 - 1.4 Data, information and knowledge
 - 1.5 Locations of knowledge
- 2.0 KM Solutions & Organization Impacts
 - 2.1 KM Solutions
 - 2.2 KM Processes
 - 2.3 KM Mechanisms and Technologies
 - 2.4 KM Infrastructure
 - 2.5 How KM Impacts Organizations
- 3.0 Factors Influencing KM & Assessment of an Organization
 - 3.1 Universalistic vs. contingency view of KM
 - 3.2 Contingency factors and effect on KM processes
 - 3.3 Identification of appropriate KM solutions
 - 3.4 KM assessment – establishing the baseline
 - 3.5 Qualitative vs. quantitative assessment
 - 3.6 KM aspects to assess
 - 3.7 Overall approaches for KM assessment
 - 3.8 Further recommendations for KM assessment

- 4.0 Artificial Intelligence & Knowledge-Based Systems
 - 4.1 Knowledge intensive areas within AI
 - 4.2 Knowledge-based systems concepts
 - 4.3 Advantages and disadvantages of knowledge-based systems
 - 4.4 Rules-based systems
 - 4.5 Frame-based reasoning
 - 4.6 Case-based reasoning

- 5.0 Knowledge Elicitation, Sharing and Data Mining
 - 5.1 Manual knowledge elicitation
 - 5.2 Automated knowledge elicitation
 - 5.3 Exchanging knowledge – the WWW
 - 5.4 Keeping knowledge secure
 - 5.5 Collaborative computing facilities
 - 5.6 Introduction to data mining
 - 5.7 Inductive learning
 - 5.8 Artificial neural networks
 - 5.9 Statistical methods

- 6.0 Knowledge Discovery Systems
 - 6.1 Knowledge discovery processes
 - 6.2 Mechanisms to discover knowledge
 - 6.3 Data mining techniques and applications
 - 6.4 Cross-Industry Standard Process for Data Mining
 - 6.5 Web data mining
 - 6.6 Data mining and CRM
 - 6.7 Barriers to the use of data mining

- 7.0 Knowledge Capture Systems
 - 7.1 What are knowledge capture systems?
 - 7.2 Using stories for capturing organization knowledge
 - 7.3 Concept maps
 - 7.4 CmapTools: a concept map browser
 - 7.5 Context based reasoning
 - 7.6 CITKA: a CxBR tool
 - 7.7 Barriers to the use of knowledge capture systems
 - 7.8 Using learning by observation to capture knowledge

- 8.0 Knowledge Sharing Systems
 - 8.1 Knowledge sharing systems introduction
 - 8.2 Corporate memory
 - 8.3 Knowledge sharing technologies and mechanisms
 - 8.4 Barriers to the use of knowledge sharing
 - 8.5 Specific types of knowledge sharing systems and examples
 - 8.6 Lessons learned systems
 - 8.7 Expertise locator systems
 - 8.8 Communities of practice

- 9.0 Knowledge Application Systems
 - 9.1 Knowledge application systems introduction
 - 9.2 Technologies for knowledge application systems
 - 9.3 Developing knowledge application systems
 - 9.4 The SBIR/STTP Online System Advisor (SOS)
 - 9.5 The National Semiconductor's Total Recall System
 - 9.6 Limitations of knowledge application systems

Learning Activities and Teaching Methods:

Lectures, Case Study Analysis and Discussion, In-Class Exercises and Presentations.

Assessment Methods:

Project, Final Exam, Attendance and Participation.

Required Textbooks/Reading:

Authors	Title	Publisher	Year	ISBN
Beccera, I, Gonzalez, A., Sabherwal, R.	Knowledge Management Challenges, Solutions, and Technologies	Prentice Hall	2004	0-13-101606-7

Recommended Textbooks/Reading:

Authors	Title	Publisher	Year	ISBN
Jashapara, A.,	Knowledge Management	Prentice Hall	2004	978-0-273- 68298-1