Title (Units): **COMP7750 Information and Knowledge Management (3,3,0)**

Course Aims: To learn the latest development of information and knowledge management solutions and related systems. A case study approach, as and where appropriate, will be adopted in introducing the course contents. Students will be able to understand how information and knowledge management can be applied in business and organization. They will be able to utilize information and knowledge management to maximize productivity.

Prerequisite: Nil

Course Intended Learning Outcomes (CILOs):
Upon successful completion of this course, students should be able to:

No.	Course Intended Learning Outcomes (CILOs)
	Knowledge
1	Explain the relationship between data, information and knowledge, and related management issues
2	Explain the principles how information and knowledge management solutions can be utilized to achieve organizational goals
3	Analyze and present cases involving information and knowledge management in solving practical problems
	Professional Skill
4	Produce a complete written project report
5	Present and communicate ideas orally
	Attitude
6	Work as a team and develop understanding of individuals' complementary capabilities, dividing the load among team members

Calendar Description: This course introduces the basic principles and technologies of information and knowledge management. Information storage and retrieval systems, knowledge management solutions, and knowledge management systems will be covered. Students will be able to understand the impacts of information and knowledge management in business and organization. They will be able to utilize information and knowledge management to maximize productivity.

Teaching and Learning Activities (TLAs):

CILOs	Type of TLA
1-6	Students will learn the concepts and skills via lectures, in-class discussion and projects.

Assessment:

No.	Assessment Methods	Weighting	CILOs to be addressed	Description of Assessment Tasks
1	Continuous Assessment	40%	4-6	It may include course work (15%) and course project (25%). Continuous assessment in the forms of case/assignment/project presentations and project report are designed to measure how well the students have learned the concepts of information and knowledge management.
2	Examination	60%	1-3	Final examination questions are designed to evaluate how well students understand and utilize the knowledge acquired.

Assessment Rubrics:

Excellent (A)	• Achieve the first three CILOs, demonstrating an excellent mastery of both the theoretical and practical aspects of the knowledge and skills in the selected topics • Able to develop correct solutions to problems in information and knowledge management, accompanied by in-depth analysis and insight • Demonstrate a thorough understanding and solid knowledge of the principles and techniques of information and knowledge management • Able to draw on a variety of techniques and relevant knowledge and appropriately apply them to new technical situations and real-life problems
Good (B)	• Achieve most of the first three CILOs, demonstrating a good understanding of the associated concepts and underlying methodologies in the selected topics • Able to develop correct solutions to problems in information and knowledge management, accompanied by adequate explanations • Demonstrate a competent level of knowledge of the principles and techniques of information and knowledge management • Ability to make use of appropriate techniques and knowledge and apply them to familiar situations and problems
Satisfactory (C)	• Achieve some of the first three CILOs, demonstrating a basic level of understanding of the associated concepts and underlying methodologies in the selected topics • Able to provide acceptable solutions to problems in information and knowledge management • Demonstrate an adequate level of knowledge of the principles and techniques of information and knowledge management • Ability to make use of some techniques and knowledge and apply them to familiar situations and problems
Fail (F)	• Achieve none of the first three CILOs, with little understanding of the associated concepts and underlying methodologies in the selected topics • Unable to provide solutions to simple problems in information and knowledge management • Knowledge of the principles and techniques of information and knowledge management falling below the basic minimum level • Unable to apply techniques or knowledge to familiar situations or problems

Course Content and CILOs Mapping:

Content		**CILO No.**
I	From Information Management to Knowledge Management	1-2
II	Managing Information Resources	1-3,5,6
III	Principles of Knowledge Management	2, 5,6
IV	Technologies for Knowledge Management	3, 5,6
V	Knowledge Management Systems	3, 5,6
VI	Case Studies	4-6
VII	The Future of Knowledge Management	2, 3,5,6

References:

- Eileen M. Milner. Managing Information and Knowledge in the Public Sector, Routledge, 2005, London; New York.
- Kenneth C. Laudon and Jane P. Laudon. Management Information Systems: Managing the Digital Firm. 16th ed., Pearson, 2019. .
- Robert D Gallier and Dorothy E. Leidner, Strategic Information Management: Challenges and Strategies in Managing Information Systems, 4th Edition, Butterworth-Heinemann, 2009.
- Kimiz Dalkir, Knowledge Management in Theory and Practice, MIT Press, 3rd ed., 2017.
- Ashok Jashapara, Knowledge Management: An Integrated Approach, 2nd ed., Pearson Education, 2010.

Course Content:

Topic

I. From Information Management to Knowledge Management
   A. Introduction: defining information and knowledge
   B. Developing an information policy and strategy
   C. Managing information, ideas and solutions

II. Managing Information Resources
   A. Data models
   B. Types of information
   C. Data warehouse
   D. Document management
   E. Content management

III. Principles of Knowledge Management
   A. Introducing knowledge management
   B. Knowledge management solutions
   C. Organizational impact of knowledge management

IV. Technologies for Knowledge Management
   A. Technologies to manage knowledge
   B. Preserving and applying human expertise: Knowledge-based systems
   C. Using past history explicitly as knowledge: Case-based systems
   D. Knowledge elicitation: from tacit to explicit knowledge
   E. The computer as a medium for sharing knowledge
   F. Discovering new knowledge: data mining

V. Knowledge Management Systems
   A. Knowledge discovery systems
   B. Knowledge capture systems
   C. Knowledge sharing Systems
   D. Knowledge application systems
   E. Enterprise knowledge portal: enterprise knowledge portal organization and infrastructure, workflow portal.

VI. Case Studies
   A. Applications related to business organization
   B. Applications related to health informatics

VII. The Future of Knowledge Management