



# **Course Syllabus Knowledge Management**

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**August – December 2021**

**Level 10th**

**Professor**

**Felix Villanueva Paz**

## I. General Information

Course:	Knowledge Management		
Prerequisite:	Business Process Management	Code	01962
Preceding	-	Semester	2021-2
Credits:	3	Cycle	10 <sup>th</sup>
Weekly hours	4 hours	Modality	Synchronous Remote
Course type and College career	<b>Mandatory:</b> Information Technology and Systems Engineering	Coordinator	Joseph Ballón <a href="mailto:jballon@esan.edu.pe">jballon@esan.edu.pe</a>

## II. Summary

The course presents a review of social and economic trends that explain the origins of knowledge management as well as the revision and implementation of key measurement models intellectual capital. It also seeks to work (in practice mode) with the technological tools used to concentrate and share knowledge within the company and to put such tools from a strategic perspective, understanding their advantages, limitations and uses. The course requires that students develop a research project on a topic of knowledge management.

## III. Course Goal

The objective of the course is to provide students with the skills to develop Knowledge Management (KM) project initiatives aligned with business strategy and learn to measure them as intangible assets to support value creation in smart organizations with intellectual capital.

## IV. Learning Results

- Recognize the differences between data, information, organizational knowledge, and intelligent organizations.
- Recognize knowledge management processes within learning organizations and in relation to their environment.
- Know and apply all the techniques and tools that allow identifying, capturing, processing, and disseminating knowledge within organizations.
- Analyze the resources that affect the developing of knowledge management processes in an intelligent organization through a strategic alignment tool to demonstrate the value creation.
- Recognition of the need for, and an ability to engage in independent and life-long learning in the broadest context of technological change.
- Ability to apply reasoning informed by the contextual knowledge to assess societal, health, safety, legal and cultural issues, and the consequent responsibilities relevant to professional engineering practice.

## V. Methodology

To achieve the objectives, the class sessions will have two parts, the first, conceptual, where the reading material will be reviewed, complemented with presentations by the professor and the students; the second part will be practical, where the concepts will be applied and discussion based on the analysis of cases, controls, or exercises assigned in class will be encouraged.

**Class Participation and attendance:** In addition to the assistance, the professor will consider participation with relevant ideas. The "virtual presence" is a lack of participation. There are class evaluations each day. Two cumulative delays are one absence.

**Case Reports:** The course is oriented toward real cases. The development of the case report is in a workgroup (max. 3 members). The case report should use the concepts of the corresponding sessions to develop frameworks and techniques that will allow them to analyze and solve the case critically (as research projects). The development of the document should be academic, technical, and efficient. The case report body must contain Introduction, Problem Definition, Analysis (diagnosis using course concepts), Practical Contribution (project initiatives in KM aligned to business strategy), Discussion, and Conclusions (by each group member). Finally, it is mandatory the References with APA style.

**Surprise Quizzes:** It will take a minimum of five (5) pop quizzes during the course, covering aspects of professor presentations, cases, or readings assigned in the class session. These quizzes will consider the final session reviewed and / or the corresponding session to discuss.

## VI. Evaluation

The evaluation system is integral and continuous. It involves the Permanent Evaluation Average (65%), the Midterm Exam (10%) and Final Exam (25%).

The Final Evaluation Average (FA) makes of this way:

$$FA = (0,10 \times ME) + (0,65 \times PEA) + (0,25 \times FE)$$

Where:

FA = Final Average

ME = Midterm Exam

PA = Permanent Evaluation Average and,

FE = Final Exam

Permanent Evaluation Average includes these items:

PERMANENT EVALUATION AVERAGE 65%		
Type of evaluation	Description	Weight %
Class Participation	Active Participation (Discuss, ask and answer)	10
Attendance	Class attendance will be valued positively	5
Case Reports	Case Reports	30
Surprise Quizzes	Surprise Quizzes	15
Final Project	Final Integrative Project	40

## VII. Content Calendar

Week	Contents	Activities / Evaluation
<p><b>LEARNING UNIT I: Origins and Principles of Knowledge Management</b></p> <p><b>LEARNING RESULTS:</b></p> <ul style="list-style-type: none"> <li>Recognize the differences between data, information, organizational knowledge, and intelligent organizations.</li> <li>Ability to apply reasoning informed by the contextual knowledge to assess societal, health, safety, legal and cultural issues, and the consequent responsibilities relevant to professional engineering practice.</li> </ul>		
<p><b>1°</b> <b>August 23<sup>th</sup> – 29<sup>th</sup></b></p>	<p><b>INTRODUCTION TO KNOWLEDGE MANAGEMENT (KM)</b></p> <ul style="list-style-type: none"> <li>What Is Knowledge Management?</li> <li>Multidisciplinary Nature of KM</li> <li>Types of Knowledge: Tacit and Explicit</li> <li>Concept Analysis Technique</li> <li>History of Knowledge Management</li> <li>From Physical Assets to Knowledge Assets</li> <li>KM for Individuals, Communities, and Organizations</li> </ul> <p>Dalkir. Knowledge Management in theory and practice The MIT press 3a Ed. Cap 1</p>	<p>Presentation of the course methodology</p>
<p><b>LEARNING UNIT II: Knowledge Management Process and Models</b></p> <p><b>LEARNING RESULTS:</b></p> <ul style="list-style-type: none"> <li>Recognize knowledge management processes within learning organizations and in relation to their environment.</li> <li>Recognition of the need for, and an ability to engage in independent and life-long learning in the broadest context of technological change.</li> </ul>		
<p><b>2°</b> <b>August 30<sup>th</sup> - September 5<sup>th</sup></b></p>	<p><b>KNOWLEDGE MANAGEMENT PROCESSES</b></p> <ul style="list-style-type: none"> <li>Major Approaches to the KM Cycle</li> <li>Meyer and Zack KM Cycle</li> <li>Bukowitz and Williams KM Cycle</li> <li>McElroy KM Cycle</li> <li>Wiig KM Cycle</li> <li>Integrated KM Cycle</li> </ul> <p>Dalkir. Knowledge Management in theory and practice The MIT press 3a Ed. Cap 2</p>	<p><b>Surprise Quiz 1</b> About Session 1</p>
<p><b>3°</b> <b>September 6<sup>th</sup> – 12<sup>th</sup></b></p>	<p><b>KNOWLEDGE MANAGEMENT MODELS</b></p> <ul style="list-style-type: none"> <li>Major Theoretical KM Models</li> <li>Von Krogh and Roos Model of Organizational Epistemology</li> <li>Nonaka &amp; Takeuchi Knowledge Spiral Model</li> <li>Choo Sense-Making KM Model</li> <li>Wiig Model for Building and Using Knowledge</li> <li>Boisot I-Space KM Model</li> <li>Complex Adaptive System Models of KM</li> <li>European Foundation for Quality Management (EFQM) KM Model</li> </ul> <p>Dalkir. Knowledge Management in theory and practice The MIT press 3a Ed. Cap 3</p>	<p><b>Surprise Quiz 2</b> About Session 2</p> <p>Assignment of cases randomly for the 1st Case Report</p>

<b>LEARNING UNIT III: Knowledge Management Techniques</b>		
<b>LEARNING RESULTS:</b>		
<ul style="list-style-type: none"> <li>• Know and apply all the techniques and tools that allow identifying, capturing, processing, and disseminating knowledge within organizations.</li> <li>• Recognition of the need for, and an ability to engage in independent and life-long learning in the broadest context of technological change.</li> </ul>		
<b>4°</b> <b>September 13<sup>th</sup> –19<sup>th</sup></b>	<b>KNOWLEDGE CAPTURE AND CODIFICATION</b> <ul style="list-style-type: none"> <li>• Tacit Knowledge Capture</li> <li>• Tacit Knowledge Capture at the Individual, Group</li> <li>• Tacit Knowledge Capture at Organizational Levels</li> <li>• Explicit Knowledge Codification</li> </ul>	<b>1st Case Report</b> Groups Presentation
	Dalkir. Knowledge Management in theory and practice The MIT press 3a Ed. Cap 4	
<b>5°</b> <b>September 20<sup>th</sup> – 26<sup>th</sup></b>	<b>KNOWLEDGE SHARING</b> <ul style="list-style-type: none"> <li>• The Social Nature of Knowledge</li> <li>• Sociograms and Social Network Analysis</li> <li>• Community Yellow Pages</li> <li>• Knowledge-Sharing Communities</li> <li>• Roles and Responsibilities in CoPs</li> <li>• Knowledge Sharing in Virtual CoPs</li> </ul>	<b>Surprise Quiz 3</b> About Session 3 and 4
	Dalkir. Knowledge Management in theory and practice The MIT press 3a Ed. Cap 5	
<b>6°</b> <b>September 27<sup>th</sup> – October 3<sup>rd</sup></b>	<b>FINDING KNOWLEDGE</b> <ul style="list-style-type: none"> <li>• Knowledge Application at the Individual Level</li> <li>• Bloom’ s Taxonomy of Learning Objectives</li> <li>• Task Analysis and Modeling</li> <li>• Knowledge Application at the Group and Organizational Levels</li> </ul>	<b>Surprise Quiz 4</b> About Session 5  Assignment of cases randomly for the 2nd Case Report
	Dalkir. Knowledge Management in theory and practice The MIT press 3a Ed. Cap 6	
<b>7°</b> <b>October 4<sup>th</sup> – 10<sup>th</sup></b>	<b>ORGANIZATIONAL CULTURE</b> <ul style="list-style-type: none"> <li>• Different Types of Cultures</li> <li>• Levels of culture</li> <li>• Organizational Maturity Models</li> <li>• Stages of Organizational Maturity</li> <li>• The Infosys KM Maturity Model</li> <li>• The KPQM Maturity Models</li> <li>• Forrester Group KM Maturity Model</li> <li>• CoP Maturity Models</li> </ul>	<b>2nd Case Report</b> Groups Presentation
	Dalkir. Knowledge Management in theory and practice The MIT press 3a Ed. Cap 7	
<b>8°</b> <b>October 11<sup>th</sup> – 17<sup>th</sup></b>	<b>MIDTERM EXAM</b>	

<p>9°</p> <p><b>October 18<sup>th</sup> – 24<sup>th</sup></b></p>	<p><b>KNOWLEDGE MANAGEMENT TOOLS</b></p> <ul style="list-style-type: none"> <li>• Knowledge Capture and Creation Tools</li> <li>• Major KM techniques, tools, and technologies.</li> <li>• Data Mining and Knowledge Discovery</li> <li>• Blogs and Mashups</li> <li>• Context Management Tools</li> <li>• Folksonomies and Social Tagging/Bookmarking</li> <li>• Personal Knowledge Management</li> <li>• Knowledge Sharing and Dissemination Tools</li> <li>• Groupware and Collaboration Tools</li> <li>• Intelligent Filtering Tools</li> </ul>	<p><b>Surprise Quiz 5</b> About Session 6 and 7</p>
	<ul style="list-style-type: none"> <li>• Adaptive Technologies</li> </ul> <p>Dalkir. Knowledge Management in theory and practice The MIT press 3a Ed. Cap 8</p>	
<p align="center"><b>LEARNING UNIT IV: Resource-Based View (Strategy) to develop Knowledge Management as Intelligent Organization</b></p> <p><b>LEARNING RESULTS:</b></p> <ul style="list-style-type: none"> <li>• Analyze the resources that affect the developing of knowledge management processes in an intelligent organization through a strategic alignment tool to demonstrate the value creation.</li> <li>• Ability to apply reasoning informed by the contextual knowledge to assess societal, health, safety, legal and cultural issues, and the consequent responsibilities relevant to professional engineering practice.</li> </ul>		
<p>10°</p> <p><b>October 25<sup>st</sup> – 31<sup>st</sup></b></p>	<p><b>KNOWLEDGE MANAGEMENT STRATEGY AND PLANNING</b></p> <ul style="list-style-type: none"> <li>• Developing a KM Strategy</li> <li>• Knowledge Audit</li> <li>• Gap Analysis</li> <li>• KM Strategy Road Map</li> <li>• Balancing Innovation and Organizational Structure</li> <li>• Types of Knowledge Assets Produced</li> </ul> <p>Dalkir. Knowledge Management in theory and practice The MIT press 3a Ed. Cap 9</p>	<p><b>Surprise Quiz 6</b> About Session 9</p>
<p>11°</p> <p><b>November 1<sup>st</sup> – 7<sup>th</sup></b></p>	<p><b>EVALUATING KNOWLEDGE MANAGEMENT</b></p> <ul style="list-style-type: none"> <li>• KM Return on Investment (ROI) and Metrics</li> <li>• Benchmarking Method</li> <li>• Balanced Scorecard Method</li> <li>• House of Quality Method</li> <li>• Results-Based Assessment Framework</li> <li>• Measuring the Success of CoP</li> </ul> <p>Dalkir. Knowledge Management in theory and practice The MIT press 3a Ed. Cap 10</p>	<p><b>Surprise Quiz 7</b> About Session 10</p> <p>Assignment of cases randomly for the 3rd Case Report</p>

<p><b>12°</b> <b>November 8<sup>th</sup> – 14<sup>th</sup></b></p>	<p><b>ORGANIZATIONAL LEARNING AND ORGANIZATIONAL MEMORY</b></p> <ul style="list-style-type: none"> <li>• How Do Organizations Learn and Remember?</li> <li>• Frameworks to Assess Organizational Learning and Organizational Memory</li> <li>• The Management of Organizational Memory</li> <li>• Organizational Learning</li> <li>• The Lessons Learned Process</li> <li>• Organizational Learning and Organizational Memory Models</li> <li>• Three-Tiered Approach to Knowledge Continuity</li> </ul> <p>Dalkir. Knowledge Management in theory and practice The MIT press 3a Ed. Cap 11</p>	<p><b>3rd Case Report</b> Groups Presentation</p>
<p><b>13°</b> <b>November 15<sup>st</sup> – 21<sup>th</sup></b></p>	<p><b>THE KNOWLEDGE MANAGEMENT TEAM</b></p> <ul style="list-style-type: none"> <li>• Major Categories of KM Roles</li> <li>• Senior Management Roles</li> <li>• KM Roles and Responsibilities within Organizations</li> <li>• The KM Profession</li> <li>• The Ethics of KM</li> </ul> <p>Dalkir. Knowledge Management in theory and practice The MIT press 3a Ed. Cap 13</p>	<p><b>Surprise Quiz 8</b> About Session 11 and 12</p> <p>Assignment of cases randomly for the 4th Case Report</p>
<p><b>14°</b> <b>November 22<sup>th</sup> – 28<sup>th</sup></b></p>	<p><b>FUTURE CHALLENGES FOR KM</b></p> <ul style="list-style-type: none"> <li>• Political Issues regarding Internet Search Engines</li> <li>• Politics of Organizational Context and Culture</li> <li>• Shift to Knowledge-Based Assets</li> <li>• Intellectual Property Issues</li> <li>• How to Provide Incentives for Knowledge Sharing?</li> <li>• Future Challenges for KM</li> <li>• KM Research</li> <li>• A Postmodern KM</li> <li>• Concluding Thought</li> </ul> <p>Dalkir. Knowledge Management in theory and practice The MIT press 3a Ed. Cap 14</p>	<p><b>4th Case Report</b> Groups Presentation</p>
<p><b>15°</b> <b>November 29th – December 5<sup>th</sup></b></p>	<p><b>FINAL PROJECT</b></p> <ul style="list-style-type: none"> <li>• Presentation and discussion of the final case</li> </ul>	
<p><b>16°</b> <b>December 6<sup>th</sup> – 12<sup>th</sup></b></p>	<p style="text-align: center;"><b>FINAL EXAM</b></p>	

## VIII. References

### Mandatory bibliography:

#### Course Textbook

- Dalkir, K. (2017). Knowledge Management in Theory and Practice (3<sup>nd</sup> edition). Cambridge, Massachusetts: The MIT Press.

### Complementary bibliography:

#### Recommended Books

- Hislop, D., Bosua, R., & Helms, R. (2018). Knowledge management in organizations: A critical introduction. (4<sup>th</sup> edition) Oxford: Oxford University Press.
- Mohapatra, S., Agrawal, A., & Satpathy, A. (2016). Designing Knowledge Management-Enabled Business Strategies. Switzerland: Springer.
- Becerra-Fernandez, I., & Sabherwal, R. (2015). Knowledge Management. Systems and Processes. (2<sup>nd</sup> edition). New York: M.E.Sharpe.
- North, K., & Kumta, G. (2014). Knowledge management: Value creation through organizational learning. Switzerland: Springer.
- Jashapara, A. (2011). Knowledge Management: An Integrated Approach (2<sup>nd</sup> edition). Harlow: Pearson Education Limited.

#### Recommended Research Papers

- Ramadan, B. M., Dahiyat, S. E., Bontis, N., & Al-Dalahmeh, M. A. (2017). Intellectual capital, knowledge management and social capital within the ICT sector in Jordan. Journal of Intellectual Capital, 18(2), 437-462.
- Wang, Wang, & Liang (2014). Knowledge sharing, intellectual capital and firm performance, Management Decision, 52(2), 230-258.
- Sharabati, A. A. A., Naji Jawad, S., & Bontis, N. (2010). Intellectual Capital and Business Performance in the pharmaceutical sector of Jordan. Management Decision, 48(1), 105-131.

## IX Professor

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