UNIVERSITÀ
DEGLI STUDI DI MILANO-BICOCCA

# COURSE SYLLABUS

# Knowledge Management

**2627-1-F9202P010**

## Aims

Kowledge and comprention
The student will acquire specific notions and competences to contribute in a critical and proactive way to the design of technological and organizational solutions aiming at the promotion of knowledge management within organizations and communities of practice.

Ability of apply knowledge and comprention
Between the key aspects carachterizing the domains there are application of technology and methodology of knowledge management. We select case study giving value to interactions among members of communities of practice,.

Autonomy of Judment
with discussion in the classroom the students will become autonomus in Judment the projects of knowledge management.

Communication Ability
with discussion in the classroom and esercitation the students will learn necessary Communication ability.

Ability of learning
The course will provide the ability of apply the most important teory of KM.

## Contents

The course deals with the issue of knowledge management starting from the historical and organizational context in which it was conceived and developed. The course critically describes the main kinds of technological solutions that have been developed to support knowledge management in different organizations and in Communities of Practice. The course discusses and compares case studies to show how the different contexts require the design

of technological solutions tailored to the specific needs of the involved community of practice. The course presents various examples of technologies for supporting the circulation and sharing of knowledge within organizations and real communities.

## Detailed program

- Motivations, history and basic concepts of Knowledge Management (KM).
- The model of creation and circulation of tacit and explicit knowledge by Nonaka and Takeuchy.
- The Communities of Practice (CoP Wenger).
- From Document Management Systems (DMS) to Knowledge Management Systems (KMS). How to stimulate the circulation and sharing of information and knowledge in organizations: some problems and issues, and an example of prototypal system.
- Knowledge Management and Knowledge Based Systems
- Rule-Based and Case-Based Reasoning as tools for knowledge representations and sharing
- Social media use in organizations.
- Presentation, discussion and comparison of some case studies of KMS in real organizations.
- Ontologies as tool for knowledge representation and sharing: a critical view.
- Expertise management: an example (DEMOIR).
- ConsiderIt: an example of technology supporting the circulation and sharing of different opinions among citizen during ballots.

## Prerequisites

The course does not require specific prerequisites, but for a basic knowledge about Information and Communication Technologies (ICT). However, it is important that the student owns a specific interest in the themes of the course which combines technological aspects with issues related to the organizational or social context in which the technology is put to work.

## Teaching form

traditional lessons, seminars of experts, and collective discussions of themes during the lectures, recitations, practical examples discussed during the laboratory. The course is composed of 24 hours interactive and the rest of the lessons will be erogative.

## Textbook and teaching resource

- Prusak, L. Where did knowledge management come from?, IBM Systems Journal, vol.40, n. 4, 2001, pp. 1002-1007.

- Chapter 3 of the book:Takeuchi I., Nonaka H., The Knowledge creating Company: How Japanese Companies Create the Dynamics of Innovation, Oxford University Press, 1995. (available on-line)

- Chapters 1 & 2 of the book: Wenger, E., Community of Practice: Learning, meaning and identity,

Cambridge University Press, Cambridge, MA 1998. (available on-line in Italian).

- Agostini, A., Albolino, S. Boselli, R., De Michelis, G, De Paoli, F., Dondi R. Stimulating Knowledge Discovery and Sharing, In Proceeding of GROUP'03, November 9–12, 2003, Sanibel Island, Florida, USA, ACM.
- Treem J.W., Leonardi P.M. Social Media Use in Organizations: Exploring the Affordances of Visibility, Editability, Persistence, and Association. Communication Yearbook, 36, pp. 143-189
- S. Bandini, "KM: l'eredità dei sistemi esperti" Mondo Digitale, 2008 (in Italian)
- OECD: Organisation for Economic Co-operation and Development; Global Science Forum Report on Applications of Complexity Science for Public Policy: New Tools for Finding Unanticipated Consequences and Unrealized Opportunities, 2008 -
- Catherine Roussey, Francois Pinet, Myoung Ah Kang, Oscar Corcho, Ontologies in Urban Development Projects, Advanced Information and Knowledge Processing, DOI 10.1007/978-0-85729-724-2_2, Springer-Verlag London Limited 2011
- F Kensing, J Blomberg, Participatory Design: Issues and Concerns, Computer Supported Cooperative Work 7: 167–185, 1998, Kluwer Academic Publishers.
- Chapters 1, 2, 4, & 5 of the book: Dan Saffer, Designing for Interaction, 2nd Edition, New Riders
- Agostini, A., De Michelis, G., Susani, M. From user participation to user seduction in the design of innovative user-centered systems. In Proceedings of the Fourth International Conference on the Design of Cooperative Systems, Sophia Antipolis , France, 23-26 May 2000.
- Yimam, D., Kobsa, A. DEMOIR: A Hybrid Architecture for Expertise Modeling and Recommender Systems 2000, IEEE

The complete material is available in the e-learning area of the course

## Semester

2?? Semester

## Assessment method

The assessment includes an oral examination about the provided documentation. The objective is to verify the knowledge and the abilities to apply the theory of KM.

## Office hours

The student can contact the teachers by email in order to fix an appointment

## Sustainable Development Goals