

## Syllabus

### Course Information

Course title: Knowledge Management for E-Business

Course number: INFS 770

Course discipline: Computer and Information Science

Course description: This course addresses the issues involved in creating *Intelligent Enterprise*. We will focus on topics related to knowledge creation and sharing; knowledge indexing; knowledge search; as well as knowledge dissemination, stewardship, and management. A knowledge management life-cycle model will be presented and discussed.

We will also address the emerging e-business frameworks, together with the challenges facing companies wishing to adopt e-business models, methods, methodologies, and architectures.

We will also explore the tools and techniques that enable knowledge management in organizations.

The topics covered in the course include:

- Knowledge Management: Organizational, Technological and Managerial Perspectives;
- Knowledge Management Life-Cycle Model and Framework;
- Organizational Domain Modeling and Ontology Building;
- XML (eXtensible Markup Language) and Web Services;
- The Semantic Web;
- Knowledge Representation Techniques and Business Rules; and
- Knowledge Search over Heterogeneous Data Sources.

Course date: Wednesday, January 24, 2007 through Wednesday, May 9, 2007

Location: Robinson Hall, B220

Meeting day(s): Wednesday

Meeting time(s): 4:30 to 7:10 PM

Prerequisite(s): INFS 622, or permission of Instructor.

### Instructor Information

Name: Dr. Larry Kerschberg

Email: kersch@gmu.edu

Office location: Science and Tech Building 2, Room 459

Office hours: Wednesdays 2-4 PM, or by e-mail appointment

Phone: 703-993-1661

Teaching assistants: Juan (Judy) Luo

### Grading Policy

Introduction: Your grade in the course will be determined by grades obtained in individual assignments; class participation (in-class attendance, discussion and WebCT participation); case study discussions focused on Knowledge Management Issues; a group research project and presentation; and a Final Exam.

The breakdown of the percentages are as follows:

Grade Components	Percentage
Individual Assignments	20
Class Participation	10
Case Study Discussions	10
Group Research Project	20
Group Research Presentation	15
Final Exam	25

In the group research projects, students form teams to perform research dealing with topics relevant to the course theme. A mechanism for peer review of team members will be used to assess each member's participation in the project.

**Textbooks**

Required reading: *Knowledge Management: Classic and Contemporary Works*, edited by Daryl Morey, Mark Maybury and Bhavani Thuraisingham, MIT Press, ISBN 0-262-133384-9

Required reading: *The Semantic Web: A Guide to the Future of XML, Web Services and Knowledge Management*, M. C. Daconta, L. J. Obrst, and K. T. Smith, Wiley Publishing, Inc., 2003, ISBN 0-471-43257-1

Recommended reading: *The Knowledge-Creating Company: How Japanese Companies Create the Dynamics of Innovation*, Ikujiro Nonaka, Hirotaka Takeuchi, and Hiro Takeuch, ISBN 0-19-509269-4

**Web sites**

INFS 770 URL: <http://classweb.gmu.edu/kersch/infs770/>

: This site was used until 2004 before we moved the course to WebCT. The Topics area may be of interest to you, although it is a bit out-of-date.