



Stevens Institute of Technology

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Syllabus

MIS 630: Data and Knowledge Management

Semester taught: Spring 2007	Start and end date of the semester: 1/22/07 to 5/4/07
Professor Name: Dr. Ira Sack Office address: Howe School of Technology Management, Management Department B418 Hoboken, NJ 07030 Office phone number: (908) 241-8153 E-mail address: isack@stevens.edu	Office Hours: M,T 9:30 am -11:00 am (EST)
	Course Web Address: http://webct.stevens.edu/SCRIPT/109342007S/scripts/serve_home

Overview

MIS 630 is about specification and implementation, using traditional (i.e., IT-oriented) and less traditional (organizational- and business-oriented) concepts, frameworks for data, information and knowledge management. The course will emphasize simplicity and elegance as well as business relevance; it will help you identify, understand and design high quality solutions that take into account a variety of organizational stakeholder viewpoints and considerations to business problems associated with data and knowledge management.

The first part of the course focuses on traditional IS development using databases/datawarehouses with a heavy emphasis on data quality. We will consider what managers (and other business stakeholders) should “know” about databases. The second part of the term focuses on modern (less traditional) approaches to IS development using knowledge work.

It is expected that you will read, reflect and communicate your understanding of the class readings and materials by responding appropriately to all assignments.

You will be required to do one short individual paper relating to database technology and one individual final project on data and knowledge work. In addition to these individual assignments, you will be assigned to a team and participate in the development of a team report on a mutually agreed upon topic. You will also be required to participate in class discussions by posting your remarks on the class discussion board. All assignments must be done in the time interval allotted. If extensions to any due date are needed you must contact the instructor and get written confirmation via email that an extension will be permitted. .

Prerequisites

MIS 502 or the equivalent.

Cross-listed with.

Learning Goals

After taking this course, the student will be able to:

- Read and draw a simple *data model*
- Identify and Analyze *data quality* in context
- Apply the *information continuum* and other high level frameworks and concepts to characterize knowledge stocks and flows in his or her organization

Pedagogy

The course will employ readings, class discussion, individual and team assignments, and individual and team homework and projects. Students will make one team presentation during the class. Students will prepare X individual presentations for class, each covering a blah, blah, blah. In the final project, students apply blah, blah, blah. In addition to the written assignment, each student will present highlights of their project to the class.

Required Text(s)

1. *A Manager's Guide to Database Technology*, By Michael R Blaha, Prentice Hall Inc.- ISBN 0-13-030418-2
2. *Organization Modeling*, By Morabito, Sack, and Bhate, Prentice-Hall Inc- ISBN 0-13-257552-3

Required Readings

Readings will be assigned for each week. These will be found on the course website.

Assignments

The course will emphasize XYZ Your first and most important assignment is to XYZ.

1. Class Participation - To enhance the learning experience, all students are expected to participate in the class discussion board by responding to the professor's postings and at least 1 posting by other students. Students may continue to post responses to a particular conversation thread throughout the term!
2. Midterm Project – Unless a special exception is made by the instructor, the Midterm paper must be completed by the required date and submitted via email to the professor in Word format along with supporting Power Point Slides.
3. Quizzes – There are no quizzes!
4. Team presentations - Each student team will choose a topic (reserve choice with instructor) and then prepare a team report consisting of Power Point slides supported by detailed notes. Choose what you present carefully to be both interesting and to fit the time constraint. Team reports will be posted by the instructor so that all students in the class can read them.
5. Final Projects – The final project is an individual student assignment. It is due the last week and must be received by noon of May 4, 2107. It must be submitted via email to the professor in Word format accompanied by Power Point slides.

The assignments and their approximate weights are as shown below:

1. Class Participation	20%
2. Midterm Project	10%
3. Team presentation	20%
4. Final Project	50%
TOTAL	100%

Please note that assignments in this class may be submitted to www.turnitin.com, a web-based anti-plagiarism system, for an evaluation of their originality.

Course Schedule

Week	Subject	Assignment Due
1	Orientation Week	Overall structure of course including description of three types of assignments: Teams formed and assigned a team topic. Each student assigned to a team to work on Team Assignment due at the team's discretion either week 9 or week 10. A Team Assignment consists of a Power Point presentation together with detailed notes.
2	Database Technology for Management I	Read Blaha: Chapters 1,2,4,5 &6. Midterm Paper Individual Assignment Assigned. Midterm consists of a short paper (in Word format) accompanied by supporting Power Point Slides.
3	Database Technology for Management II	Read Blaha: Chapters 8,9,10. & 11
4	Foundations of Data Quality I	Read two short papers by Redman + paper by English.
5	Foundations of Data Quality II	Read Strong et al's paper + paper by Haebich on a Methodology for Management of Data Quality. Optionally read paper by Wand & Wang.
6	Datawarehouses	Read Blaha: Chapters 12, 13 + paper entitled "DW 2.0: the Next Generation of Data Datawarehousing " by Inmon.
7	Strategic Information Systems Planning + Midterm Project (Due)	Read Earl's paper on Strategic Information Planning systems (SISP). Individual Midterm Project Paper and accompanying Power Point Slides to be sent to instructor via email by March 11, 2007 at 5:00 PM.
8	Knowledge Work/ Knowledge Binding	Read paper on Knowledge Binding by Morabito, Sack & Bhate Read paper on the Next Society by Peter Drucker
9	Team Project (Due) + Organization Modeling/ Organizational Molecules	Each Team must submit Team Project in the form of a Power Point Presentation with detailed notes either this week or the week after (i.e., Week 10) Final Individual Project Assigned.. Final Assignment will consist of a paper in Word format + a set of accompanying Power Point Slides. Also, read short paper on Organization Modeling and Organization Molecules by Sack..
10	Data, Knowledge and Information I	Last week to submit Team Project if not submitted the previous week.. Final date for submission of Team Project is April 8, 2007 before 5:00 PM. Read Organization Modeling Chapter 12 pp. 199 - 214
11	Data, Knowledge and Information II	Read Organization Modeling Chapter 12 pp. 215 -229
12	Data Knowledge and Information III/ Organizational Learning	Read Organization Modeling Chapter 14 pp 248 -265 + paper on the Learning Organization
13	Emergent Knowledge/ Semantic Web	Read paper on Emergent Knowledge by Mui and paper on the Semantic Web by Berners-Lee et al.
14	Final Project (Due)	Final Individual Project consisting of a Final Paper and accompanying Power Point Slides to be sent via email to instructor by Friday May 4, 2007 at noon.