

## Information Systems Development and Management (Fall 2009)

### Basic Course Information

#### Instructor

Ramanath Subramanyam  
Office: 96 Wohlers Hall  
Phone: Work: 217-244-7087  
E-mail: rsubrama@illinois.edu  
Office Hours: by Appointment  
Website: <http://compass.uiuc.edu>

#### Course Materials

*Required Course Packet:* Available as a Custom eBook/Online Viewing Book from  
<http://ebooks.primisonline.com/eBookstore/index.jsp>  
(Please follow the specific instructions for ordering the course-packet)

#### Objectives

This course covers technology and business issues in managing the various pieces of the enterprise information systems (IS) infrastructure, which enable firms to create value for customers and shareholders of the firm. We will address the perspectives of both the users and creators of this infrastructure. This will help students in understanding the technological as well as business implications of the IS decisions in firms.

There are two INTERLEAVED Elements in this course - (a) Business and Infrastructure Issues related to IT and Software, and (b) Understanding project management and development concerns in creating Information Systems solutions (You do not need to know Programming).

**Methods:** The first element will be taught using case, lecture and article discussions. The Second Element will be covered using in-class demonstrations, lectures. Students will work on a term project that ties the two elements together. They may employ Microsoft Visio in creating the for the term project.

**Topics:** The first element is the evolution of the IS infrastructure. Class lectures and Case discussions address topics such as Enterprise Resource Planning Systems, Customer Relationship Management, Systems Supply Chain Management applications and IT outsourcing. These topics will be handled primarily through real-world business cases and selected articles. We will try to understand challenges and benefits posed in successful implementation of these pieces in the enterprise information systems infrastructure. We will raise questions and attempt answers to fundamental questions such as: What are the benefits of an Enterprise Resource Planning (ERP) solution? What are some benefits of integrating a supply chain through IT Applications? What are the implications of Customer Relationship Management (CRM) and Supply Chain Management (SCM) software solutions to organizations? These discussions will aid students in understanding the managerial implications of these technologies and enable them to make intelligent business decisions.

The second element, closely interleaved with the first element, covers the area of Software Development. Almost every professional who works in a field related to/interacting with Information Technology requires an understanding of how IT/software projects are developed or managed. This element of the course attempts to provide fundamental managerial skills for students who will work on IT projects or be associated with an IT project closely. We will also cover basic elements of IT Project Mgmt such as Cost and Schedule management in the process. We will also discuss various kinds of development process models that can be applied to different kinds of software projects.

## Course Grades/Project

The course grading policy will be discussed on the first day of class. It has the following breakup

- 25% for the term project report
- 20% for Quizzes 1 and 2 [Multiple choice]
- 10% for class participation
- 15% for the topic presentation and discussion facilitated by the student group [50% of the credit will be given for innovative ideas for presentations/discussions and the level of interactivity in the class]
- 30% for the case and article write-ups. [Unless otherwise specified, the article write-ups will require submission of a ONE-page (maximum of 1 ½ pages) single-spaced typed document (with 12 point font) due during the class on which the write-up is due. The questions will be provided to you in advance.]

Let us make sure that it will be a rewarding experience for all of us by coming prepared to each class.

**Term project** : The details of the project will be available in a **separate document**.

**Term project reports are due on the last day of class.** The project report should be within 3000-5000 words. A large report is not required for this assignment but diligent effort is expected. **The project report will be worth 20%** of the total grade for the course and the **project slides and presentation will be worth 10%**. Approximately 85% of the project report grade will be based on content and 15% on form. Poor writing, lack of proof reading, and excessive stylistic errors may result in a lower grade in the project. The project presentation should be of a professional quality. The goal of the presentation is to provide practice in presenting the material to an audience.

**Class participation (10% of grade)**: Your class participation grade depends on your ability to add to class discussions through quality contributions. You are expected to be prepared with the reading assignments for the class and should actively engage in the classroom learning experience. A contribution in the class that enhances the group learning is considered good.

**Honor Code and Academic Integrity**: We will adhere to the academic integrity rules specified in the university policy manual. Please visit this link:

[http://www.admin.uiuc.edu/policy/code/article\\_1/a1\\_1-402.html](http://www.admin.uiuc.edu/policy/code/article_1/a1_1-402.html) for more information.

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## Information Systems Development and Management - Class Schedule - Fall 2009 (TENTATIVE)

Class/ Date	Theme	Topics covered	Reading	Assignment
Class 1: Aug 27	- Introduction, Course Objectives, Grading Policy, etc...			
Class 2: Sep 3	Management of IT/Systems	Forms of IT	<b>Assigned:</b> From e-Book Coursepack "Mastering the Three Worlds of Information Technology", Harvard Business Review, 2006.	One page (maximum of 1 ½ pages) answer to the questions provided to you.
Class 2: Sep 10		IT Governance and Project Management Basics	<b>Assigned:</b> From e-Book Coursepack: "They Bought In and Now They Want to Bail Out," by Eric McNulty, HBR  <b>Strongly Recommended:</b> CIO Magazine article on IT Governance available at: <a href="http://www.cio.com/article/print/29162">http://www.cio.com/article/print/29162</a>	One page (maximum of 1 ½ pages) answer to the questions provided to you.
Class 3: Sep 17	Systems Infrastructure	- Introduction to Enterprise Applications  - Challenges in implementing Enterprise Applications	<b>Assigned:</b> "Cisco Systems, Inc: Implementing ERP" From e-Book Coursepack - HBS Case  <b>Strongly Recommended:</b> (Prior to reading the case) CIO.com article on ABCs of ERP: <a href="http://cio.com/article/print/40323">http://cio.com/article/print/40323</a>	One page (maximum of 1 ½ pages) answer to the questions provided to you.
Class 4: Sep 24	Systems Infrastructure	- Customer Relationship Management & Demand Chain Applications  - Supply Chain Management applications	<b>Assigned:</b> From e-Book Coursepack: "CRM Done Right," HBR  CIO.com article on ABCs of CRM at: <a href="http://cio.com/article/print/40295">http://cio.com/article/print/40295</a>  CIO.com article on ABCs of SCM <a href="http://www.cio.com/article/print/40940">http://www.cio.com/article/print/40940</a>	One page (maximum of 1 ½ pages) answer to the questions provided to you.

<b>Class 5:</b> Oct 1	Management of IT/Systems	- Software Life cycles	<b>Article Reading:</b> "Retiring Life Cycle Dinosaurs: Systems Development" <b>From</b> <a href="http://www.agilealliance.com/show/1071">http://www.agilealliance.com/show/1071</a>	One page (maximum of 1 ½ pages) answer to the questions provided to you.
<b>Class 6:</b> Oct 8	Systems Infrastructure	- IT/Software as a Service - Basics of Service Oriented Architectures - Alternative forms of sourcing software - Web Services and ASPs  - Review of Quiz material	<b>Assigned:</b> CIO.com article on ABCs of ASPs/Software as a Service available at: <a href="http://cio.com/article/109704/ABC_An_Introduction_to_Software_as_a_Service">http://cio.com/article/109704/ABC_An_Introduction_to_Software_as_a_Service</a>  <b>Suggested:</b> Business Week article: Cloud Computing <a href="http://www.businessweek.com/print/technology/content/aug2008/tc2008083_619516.htm">http://www.businessweek.com/print/technology/content/aug2008/tc2008083_619516.htm</a>	One page (maximum of 1 ½ pages) answer to the questions provided to you.
<b>Class 7:</b> Oct 15		<b>Part 1: Tentative (Company Presentation)</b>  <b>Part 2: QUIZ 1</b>		
<b>Class 8:</b> Oct 22	Systems Infrastructure / Management of IT/Systems	- Service Oriented Architectures  - Project Discussion	<b>Articles for Reading:</b> The Joy of Flex: CIO Magazine, available at: <a href="http://www.cio.com/article/print/10514">http://www.cio.com/article/print/10514</a>  The Truth about SOA: CIO Magazine article <a href="http://www.cio.com/article/print/21975">http://www.cio.com/article/print/21975</a>  <b>Term Project-related:</b> From eBook coursepack, read "Breakthrough Ideas for 2008" – HBR article	One page (maximum of 1 ½ pages) answer to the questions provided to you.

<b>Class 9:</b> Oct 29:	Management of IT/Systems	<b>PART 1:</b> Cost, Schedule and Resource Management: - Discussion of techniques (e.g. Earned Value Management) - Schedule and Resource Management:		One page (maximum of 1 ½ pages) answer to the questions provided to you.
	Emerging Technologies	<b>PART 2: Student presentations:</b>		
<b>Class 10</b> Nov 5:	Management of IT/Systems	<b>PART 1:</b> Strategic Elements of IT/Software - Prioritization Case Discussion	<b>Assigned:</b> From eBook coursepack "Volkswagen of America: Managing IT Priorities" - HBS Case	One page (maximum of 1 ½ pages) answer to the questions provided.
	Emerging Technologies	<b>PART 2: Student presentations</b>		
<b>Class 11</b> Nov 12:	Management of IT/Systems	<b>Topics:</b> - NPV approach - Challenges to approaches such as NPV for IT Projects; - Alternative approaches	<b>Assigned:</b> From eBook coursepack "Beyond Valuation: Options Thinking In IT Project Management" - CMR	One page (maximum of 1 ½ pages) answer to the questions provided to you.
	Emerging Technologies	<b>PART 2: Student presentations</b>		
<b>Class 12:</b> Nov 19	Emerging Technologies	<b>Project Discussion + Student Presentations</b> --- Technology Trends		
<b>Nov 26</b>		<b>THANKSGIVING BREAK</b>		
<b>Class 13:</b> Dec 3		<b>Final Project Report</b>  <b>PART 2: QUIZ 2</b>		