

University of Missouri – Saint Louis - Syllabus

August 2009

Course	MIS 6838 – Business Process Design, Management and Integration – Fall 2009 Clark 400		
Course Description	<p>This course presents the concepts and state of the art / state of the practice of business process design and business process reengineering for improving business performance, effectiveness, quality, customer service and satisfaction. Issues related to characteristics, goals, benefits and costs of enterprise-wide design, and the role of information technology during the design process will be discussed. Specific topics will include: the history and development of process focused businesses and the impacts on processes caused by just-in-time and total quality management philosophies, organizational learning, strategy mapping, et.al.. We will also discuss the exploitation of core competencies and changing business scenarios such as globalization and electronic-commerce. We will draw from the literature to explore the notion of moving from business strategies to business processes. We will review current writings relative to the subject, and then will apply our knowledge to actual process design, documentation, analysis and simulation. We will introduce computer-based modeling tools for process design and simulation, and use those tools in both in-class and individual work.</p>		
Course Objectives	<ul style="list-style-type: none"> • Develop an understanding of the concepts attendant to business processes • Develop an understanding of the development of processes which are consistent with changing business environments and practices • Develop an understanding of and an ability to apply state of the art process development and evaluation / simulation practices and tools 		
Instructor	<p>Richard A. Navarro 314-516-4883 (Office) 314-346-8849 (Mobile) CCB 224 Navarror@UMSL.edu</p>		
Course Materials	<ul style="list-style-type: none"> • Required Readings from The Literature ... All assigned reading is available to UMSL students either from the UMSL Thomas Jefferson library or Online; See this syllabus and MyGateway • Suggested Reading: Seppanen, Kumar, and Chandra: <u>Process Analysis and Improvement Tools and Techniques</u>, McGraw Hill Irwin, New York, NY, 2005 		
Course Grading	<ul style="list-style-type: none"> • Class Participation • Team Case Studies • Individual reading/report • Individual Project • First Examination • Second Examination • Third Examination 	<ul style="list-style-type: none"> 5% 5% 10% 20% 20% 20% 20% 	<ul style="list-style-type: none"> A: 90% or higher B: 80% - 89.9% C: 70% - 79.9% F: less than 70%

Policy Statements	<p>University policy clearly defines the requirements for academic honesty and defines the disciplinary actions to which a student may be subject if these requirements are violated.</p> <p>All students are expected to respect their classmates, the instructor and the university; Civility is a basic requirement</p> <p>This syllabus may be revised at the discretion of the instructor without the prior notification or consent of the student.</p>
Weekly Schedule	<p>Pre-Assignment for Week 1</p> <ul style="list-style-type: none"> Suggested Reading: Seppanen, Kumar, and Chandra Chapter 1 ... <u>Introduction to Process Analysis and Improvement</u>
Week 1 August 25	<p>6838 Part I - Introduction to Business Processes and Processes Modeling</p> <p>This Week's Topics:</p> <ul style="list-style-type: none"> Introductions, Course Objectives, Expectations. Definitions ... <i>The mandate for ever enhancing processes. Process development basics / IDEF / ICOM</i> <p>-----</p> <p>Assignments for Week 2:</p> <ul style="list-style-type: none"> Reading Assignment ... Review the business sections of the daily newspaper, the Wall Street Journal, the Saint Louis Business Review, etc and find an article concerning how processes and process improvement have impacted a company. Homework assignment ... Write a one to two paragraph discussion of the article and post it to the week's discussion board. Be prepared to discuss your readings in class. Reading Assignment ... <u>The Open Group ... Architectures and Architectural Frameworks</u>
Week 2 01 September	<p>This Week's Topics:</p> <ul style="list-style-type: none"> Class Discussion ... Business Processes ... <i>review of class findings from the business press</i> Alternate Modeling and Analysis Frameworks ... <i>Structured ways of looking at today's business realities; multiple perspectives; frameworks from ARIS to Zachman to DoD to TOGAF to</i> <p>-----</p> <p>Assignments for Week Three</p> <ul style="list-style-type: none"> Reading Assignment: Kettinger et.al., <u>Business Process Change: A Study of Methodologies, Techniques, and Tools</u> Muehlen et.al., <u>Sometimes Less is More ... Are Process Modeling Languages Overly Complex?</u> Reading Assignment: Green and Rossman <u>Integrated Process Modeling: An Ontological Evaluation</u> Reading Assignment: Green and Rossman <u>Perceived Ontological Weaknesses of Process Modeling Techniques</u> Reading Assignment: Muehlen, Becker and Indukska

Sometimes Less is More: Are Process Modeling Languages Overly Complex?

Week 3
08 September

This week's Topics

- Ontology and Process Modeling ... *What is real? What is real to you? What is real to me? How does this notion of reality impact process modeling?*
- Process Modeling ... *A general process, process analysis, The evolution of process modeling theory and tools from sticky notes to IDEF to UML to ... are we getting better?*

Assignments for Week 4:

- Reading Assignment : Profozich and Markovitch, An Arena Tutorial
 - Reading Assignment: Hammann and Markovitch, An Introduction to Arena
 - Suggested Reading: Seppanen, Kumar, and Chandra Chapter 2 ... Process Analysis and Improvement using Visio and Chapter 6 ... Process Simulation Using Arena
-

Week 4
15 September

This Week's Topics:

- As-Is Process Modeling and Analysis ... *Introduction to process modeling and analysis tools ... VISIO and ARENA*

Assignments for Week 5:

- Review for examination
- Reading Assignment Dobbs, Continuous Improvement
- Reading Assignment ... Read, Some Problems in Applying Quality
- Team Assignment: Working in teams, work the Fast Food Case ... as posted on MyGateway; visit a Fast Food restaurant of your choice and observe and analyze the processes in place.

6838 Part II ... Factors that drive Business Processes

Week 5
22 September

This Week's Topics:

- Fast Food Case Study Presentations and Discussion
- **Examination One**
- From Business Strategies to Processes ... *Implications of growing belief in the importance of Quality; the TQMS philosophy and The Philosophy we call Big Q*

Assignments for Week 6:

- Team Assignment: Working in teams, prepare an analysis of the Hank Kolb - Director of Quality case as posted on MyGateway
 - Reading Assignments: TBA
-

Week 6
29 September

This Week's Topics:

- Hank Kolb / Quality Case Study Presentations and Discussion
 - From Business Strategies to Processes ... *Implications of new ways of thinking about*
-

production; Green, Green Manufacturing, Sustainable Design

- Examination One

Assignment for Week 7:

- Reading Assignment ... White, et.al, JIT Manufacturing, A Survey
- Reading Assignment ... Flynn, et.al, The Relationship between JIT and TQMS

Week 7
06 October

This Week's Topics:

- From Business Strategies to Processes ... *Implications of the Just In Time concept; Lean, and the relentless elimination of waste in the product production and white collar sectors*

Assignment for Week 8:

- Reading Assignment : Lacity and Rottman: Twenty Practices for Offshore Sourcing;
- Reading Assignment: Carmel and Agarwal : The Maturation of Offshore Sourcing

Week 8
13 October

This Week's Topics:

- From Business Strategies to Processes ... *Implications technology advances on business; eCommerce, eBusiness, eLearning, and eGovernment*
- From Business Strategies to Processes ... *Implications on processes of concepts such as Globalization*

Assignments for Week 9:

- Reading assignment: Peter Senge and the Learning Organization
- Reading Assignment: Kofman and Senge : Communities of commitment: the heart of learning organizations
- Reading Assignment: Kaplan and Norton : Having Problems with your Strategy ... Then Map It

Week 9
20 October

This Week's Topics:

- From Business Strategies to Processes ... *Implications on processes of concepts such as: The Learning Organization; Communities of Practice; Core Competencies*
- From Business Strategies to Processes ... *Strategy Mapping and Porter's Five Forces as ways to examine processes and performance to those processes*

Assignments for Week 10:

- Reading assignment: TBD
- Review for examination

Week 10
27 Oct

This Week's Topics:

- Topics of special interest
 - Examination Two
-

Week 11 03 Nov	<hr/> <p>Assignments for Week 11:</p> <ul style="list-style-type: none"> • Individual readings <hr/> <p>This Week's Topics:</p> <ul style="list-style-type: none"> • Business Process Engineering Readings / State of the Practice • Chronology of thought re: BPR <hr/>
	<hr/> <p>Assignment for Week 12:</p> <ul style="list-style-type: none"> • Reading Assignment: Davenport and Stockard ... <u>Reengineering: Business Change of Mythic Proportions</u>; • Reading Assignment: Ittner and Larcker ... <u>The Performance Effects of Process Management Techniques</u>
	6838 Part III ... Process Development
Week 12 10 November	<hr/> <p>This Week's Topics:</p> <ul style="list-style-type: none"> • Business Process Design ... Commitment and Requirements Phase • Business Practice Design ... Process Development Phase <hr/>
	<hr/> <p>Assignments for Week 13</p> <ul style="list-style-type: none"> • Reading assignment TBA
Week 13 17 November	<hr/> <p>This Week's Topics:</p> <ul style="list-style-type: none"> • Business Practice Design ... Process Development Phase, Concluded <ul style="list-style-type: none"> o Business Process Design ... Approaches o Business Process Design ... The Software Analogy... Structured Design / Object Oriented Design <hr/>
	<hr/> <p>Assignment for Week 14:</p> <ul style="list-style-type: none"> • Team Assignment: consider the Call Center Case as posted on MyGateway. <ul style="list-style-type: none"> o Consider your approach to analyzing the case o Prepare a top level process diagram o Discuss the use of Arena to analyze the process o Discuss improvement actions that might be indicated o Consider how the techniques illustrated in this case may be of use in your final individual projects
Week 14 01 December	<hr/> <p>This Week's Topics:</p> <ul style="list-style-type: none"> • The Call Center ... Team reports • In-Class Simulation Workshop ... students will have the opportunity to, working individually or in ad hoc groups, hone their skills with process modeling and simulation tools. <ul style="list-style-type: none"> o To-Be Process Modeling, Analysis Optimization: o Visio and Excel for modeling and analysis o Stochastic Simulation using Arena o Process Analysis by Stochastic Simulation <hr/>

using Arena

Assignment for Week 15:

- Reading Assignment TBA
 - Review for third examination
-

Week 15
08 December

This Week's Topics:

- Topics of Special Interest
 - **Examination Three**
-

Semester Assignment

- Working individually, model and analyze a business process with which you are familiar, simulate that process using Arena and consider the statistics resulting from the simulation; make improvements to the process, model those improvements and simulate the improved process and compare the results with the results from the un-improved process.
-