<table>
<thead>
<tr>
<th>Course Description</th>
<th>Course Objectives</th>
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| 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. | • 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 |
Course Materials

• 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 Reference: Kelton, et al.: Simulation with Arena, McGraw Hill, New York, New York (Note: This book is NOT required, but it does offer some valuable information concerning simulation as a process tool in general and process simulation using the Arena Simulation system in general)

• Suggested Reference: Seppanen, Kumar, and Chandra: Process Analysis and Improvement Tools and Techniques, McGraw Hill Irwin, New York, NY, 2005 (Note: This book is NOT required, but it does offer some practical tips for the process practitioner; I will from time to time refer to it for supplemental material)

• Suggested Reference: Association of Business Process Management Professionals: Guide to the Business Process Management Common Body of Knowledge, Chicago IL 2009 (Note: This book is NOT required, but it does offer general background information for the process practitioner)

Course Grading

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<thead>
<tr>
<th>Component</th>
<th>Percentage</th>
<th>Grade Range</th>
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<tbody>
<tr>
<td>Class Participation</td>
<td>10%</td>
<td>A: 90% or higher</td>
</tr>
<tr>
<td>Team Case Studies</td>
<td>20%</td>
<td>B: 80% - 89.9%</td>
</tr>
<tr>
<td>Individual Project</td>
<td>30%</td>
<td>C: 70% - 79.9%</td>
</tr>
<tr>
<td>First Examination</td>
<td>20%</td>
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<tr>
<td>Second Examination</td>
<td>20%</td>
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Policy Statements

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.

All students are expected to respect their classmates, the instructor and the university; Civility is a basic requirement

The University, the college, and the department and all UMSL Faculty and Staff are fully supportive of all policies concerning special-needs students. Any student who requests accommodations requiring extended exam time, alternate testing procedures, etc. should contact the Disability Assessment Services Office for an auxiliary aids and special services assessment; The Office will work with the faculty to ensure the students’ needs are appropriately addressed.

This syllabus may be revised at the discretion of the instructor without the prior notification or consent of the student.

Weekly Schedule

Pre-Assignment for Week One

• Suggested Reading: Seppanen, Kumar, and Chandra Chapter 1 ... Introduction to Process Analysis and Improvement

6838/6395 Part I – Introduction to Business Processes and Processes Modeling

Week 1
21 Aug

This Week’s Topics:

• Introductions, Course Objectives, Expectations. Definitions ... The mandate for ever enhancing processes. Process development basics / IDEF / ICOM

Assignments for Week Two:

• 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.

- Write a one to two paragraph discussion of the article and post it to the established assignment Drop-Box. Be prepared to discuss your readings in class.

- Reading Assignment: Kettinger et.al., Business Process Change: A Study of Methodologies, Techniques, and Tools
- Reading Assignment : Muehlen et.al., Sometimes Less is More ... Are Process Modeling Languages Overly Complex?
- Suggested Reading: Green and Rossman, Perceived Ontological Weaknesses of Process Modeling Techniques

Week 2
28 Aug

This Week’s Topics:

- Class Discussion ... Business Processes ... review of class findings from the business press ... business processes at work
- 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 Three:

- Reading Assignment {read for concept } ... The Open Group ... Architectures and Architectural Frameworks
- Reading Assignment: Zachman {read for concept } ... A Framework for Information Systems Architectures
- Reading Assignment: Snoek {read for concept } ... Experiences with the Zachman Framework

Week 3
04 Sep

This week’s Topics

- Alternate Modeling and Analysis Frameworks ... Structured ways of looking at today’s business realities; multiple perspectives; frameworks from ARIS to Zachman to DoD to FEA to TOGAF to ....

Assignments for Week Four:

- Reading Assignment {read for concept } : Profozich and Markovitch, An Arena Tutorial
- Reading Assignment {read for concept } : Hammann and Markovitch, An Introduction to Arena
- Suggested Reading: Seppanen, Kumar, and Chandra
Week 4  
11 Sep

This Week’s Topics:
- As-is Process Modeling and Analysis ... Introduction to process modeling and analysis tools ... VISIO and ARENA

Assignments for Week Five:
- Team Assignment: Working in teams, work Case Number One ... the Fast Food Case ... as posted on MyGateway; visit a Fast Food restaurant of your choice and observe, document and analyze the processes in place.
- Reading Assignment: The Atlantic (2013) ... Can Language Effect Your Eating Habits?
- Reading Assignment: Kay and Kepton (1984) ... What is the Sapir Whorf Hypothesis
- Suggested Reading : Thompson ... The Sapir Whorf Hypothesis ... Worlds Shaped by Words

Week 5  
18 Sep

This week’s Topics
- Fast Food Processes Case Study Presentations and Discussion
- Linguistic Relativity ... How does the way we speak and think influence the ways in which we do business

Assignments for Week Six
- Reading Assignment: G. Hofstede (1980) ... Motivation, Leadership and Organization: Do American Theories Apply Abroad?
- Reading Assignment: ( Read for Concept ) Leung et.al. (2005) ... Culture and International Business
- Suggested Reading :( Read for Concept ) Owens and McLaurin ... Cultural Diversity and Project Management

Week 6  
25 Sep

This week’s Topics
- Culture and Cultural Norms ... Business processes and businesses now span the globe, and businesses must interact with different cultures and businesses ... How does this influence our business processes?

Assignments for Week Seven
- Reading Assignment: Altman: When Green isn’t Mean
- Reading Assignment: Porter and van der Linde: Green and Competitive; Ending the Stalemate

Week 7  
02 Oct

This Week’s Topics:
- From Business Strategies to Processes ... Implications of new ways of thinking about production; Green, Green Manufacturing, Sustainable Design
Assignments for Week Eight:
• Reading Assignment ... White, et.al, JIT Manufacturing, A Survey
• Reading Assignment .... Dobbs, Continuous Improvement
• Reading Assignment ... Read, Some Problems in Applying Quality
• Reading Assignment ... Flynn, et.al, The Relationship between JIT and TQMS
• Reading Assignment ... Koning .... Lean Six Sigma in Healthcare

**Week 8**  
09 Oct  
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, services, and blue and white collar sectors  
• From Business Strategies to Processes ... Implications of the growing belief in the importance of Quality; the TQMS philosophy and The Philosophy we call Big Q, and Six Sigma  
• From Business Strategies to Processes ... Implications of Lean Six Sigma ... ... making work better using Six Sigma approaches and making work faster using Lean approaches

Assignments for Week Nine:  
• Review the business sections of the daily newspaper, the Wall Street Journal, the Saint Louis Business Review, etc. and find an article concerning how linguistics, green, JIT etc. have impacted a business and its processes. Write a one or two page summary of the article and post it to the discussion board. Be prepared to discuss in class.  
• Review for examination

**Week 9**  
16 Oct  
This Week’s Topics:  
• Special topics of class interest from the business press  
• Examination One

Assignments for Week Ten  
• Reading Assignment: Fisher (1997) ... What is the Right Supply Chain?  
• Reading Assignment [Read for Concept]: Gefen and Carmel: Is the World Really Flat ...  
• Reading Assignment [Read for Concept]: Lacity and Rottman: Twenty Practices for Offshore Sourcing;  
• Reading Assignment [Read for Concept]: Carmel and
Agarwal: The Maturation of Offshore Sourcing

- Reading Assignment: (Read for Concept) Cao: the Study of eCommerce Business Models

Week 10
23 Oct

This Week’s Topics
- From Business Strategies to Processes … Globalization
- From Business Strategies to Processes … eCommerce
- From Business Strategies to Processes … Supply Chain Design, Development, and Management as part of the overall business process

Assignments for Week Eleven
- Team Assignment: Working in teams, work Case Number Two … Hank Kolb Director of Quality Case … as posted on MyGateway

Week 11
30 Oct

This Week’s Topics:
- Team Case Study Reports … Hank Kolb, Director of Quality … What Impacts are there for Business Process Design?
- Business Processes … discussion about processes based on readings from the business world / business news / et.al.
- The Software Analogy to Process Design
  - Life cycles
  - Coupling
  - Cohesion
  - Integration

Assignment for Week Twelve:
- Reading Assignment: Goguen and Linde … Techniques for Requirements Elicitation
- Reading Assignment (Read for Concept): Nuseibeth and Easterbrook: Requirements Engineering Roadmap

Week 12
06 Nov

6838/6395 Part III … Process Development

This Week’s Topics:
- Business Processes … A Fad? A Myth?
- Business Process Design … Commitment and Requirements Phase
  - Requirements Elicitation
  - Requirements Management / Engineering

Assignments for Week Thirteen:
- Reading Assignment (Read for Concept): Davenport and Stockard … Reengineering: Business Change of Mythic Proportions;
- Reading Assignment (Read for Concept): Ittner and Larcker … The Performance Effects of Process Management Techniques

Week 13
13 Nov

This Week’s Topics:
- Business Process Design
Work Centered vs People Centered Approaches

• In Class Work Session … Case Number Three

Assignment for Week Fourteen:

• Team Assignment: consider Case Number Three ... the Call Center case as posted on MyGateway.
  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

Aside ... this team study is designed to afford you the opportunity to, working in groups, try your hand at a process improvement study.

<table>
<thead>
<tr>
<th>Week 14</th>
<th>This Week’s Topics:</th>
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<tbody>
<tr>
<td>20 Nov</td>
<td>The Call Center ... Team Reports</td>
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<tr>
<td></td>
<td>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.</td>
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<td></td>
<td>To-Be Process Modeling, Analysis, and Optimization:</td>
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<td></td>
<td>Visio and Excel for modeling and analysis</td>
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<td>Process Analysis by Stochastic Simulation using Arena</td>
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<td>Aside ... this in-class workshop is designed to afford you the opportunity to draw on the developing expertise in your class relative to simulation as a process development and analysis tool</td>
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Assignment for Week Fifteen:

• 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 a business and its processes. Write a one or two page summary of the article and post it to the discussion board. Be prepared to discuss in class

• Review for second examination

<table>
<thead>
<tr>
<th>25-30 Nov</th>
<th>Fall Break</th>
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<tr>
<th>Week 15</th>
<th>This Week’s Topics:</th>
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<tbody>
<tr>
<td>04 Dec</td>
<td>Topics of Special Interest</td>
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<tr>
<td></td>
<td>Examination Two</td>
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</tbody>
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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.