Student Demographics

<table>
<thead>
<tr>
<th>IDSc 3202 Demographics</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>2006-7 (116 students)</strong></td>
</tr>
<tr>
<td>MIS (Major or Minor)</td>
</tr>
<tr>
<td>Supply Chain Major</td>
</tr>
<tr>
<td>Other (Entre., Csci, Finance)</td>
</tr>
</tbody>
</table>

(self-reported data)

Required for:
- MIS Major
- MIS Minor
- Supply Chain Major (through 2009 - 10)

Elective for:
- Entrepreneurial Management Major
- Entrepreneurial Management Minor
- Supply Chain & Operations Major (2010+)

(from Proposed Changes to the Undergraduate Curriculum, April 25, 2008)

Course Overview

We have all felt the increasing market pressure toward shorter product and service life cycles. This has led organizations to sharpen their abilities to optimize and automate their business processes. These process improvement projects occur:

- across all business disciplines: finance, supply chain, operations, human resources
- in all types of enterprises:
  - from Fortune 100 companies to single-person start ups
  - from international public companies to local nonprofits

However, even optimized, automated processes are only a means to an end. They produce benefits only when MIS and business management work together to effectively plan and design processes that support business objectives.

This class focuses on **improving and automating key business processes**. It covers critical skills for those with career goals including: business analyst, supply chain manager, operations manager, finance manager, MIS manager, project manager, and other process-oriented roles in today’s enterprises.

My Perspectives

- **Importance**
- **Emphasis**: Business Analyst role (lead Analysis & Transition, monitor Design & Implementation)
- **Analyst Role**: Ambiguity -> Clarity
- **Projects**:  
  - **Cases**: Used to reinforce principles  
  - **Supporting Software Tools**  
  - **UML/ traditional approaches**
IDSc 3202  Analysis & Modeling for Business System Development

Learning Outcomes

1. Describe the vocabularies, concepts, and frameworks of business processes, project selection, and alternative project methodologies.

2. Discuss and compare organizational models for process improvement projects: MIS and business management roles.

3. Analyze business processes and make recommendations for automation, improvement, or re-design.

4. Kick off business process improvement projects by creating effective Initiation and Plan Phase documents.

5. Diagram business processes and data using typical business analyst tools (use cases, data flow diagrams, entity diagrams) and software (MS Visio and MS Access).


7. Synthesize class material by working effectively on a cross-functional team to initiate, plan, analyze, and prototype a small business process improvement.

Course Coverage (modified Fall, 2007)

<table>
<thead>
<tr>
<th>Material Depth</th>
<th>Active Support</th>
</tr>
</thead>
<tbody>
<tr>
<td>(in addition to assignments)</td>
<td></td>
</tr>
</tbody>
</table>

**Overview**
- Business Process concepts: H
- System Analyst role, importance: H
- SDLC overview and options: H
- Supporting software tools: M

**Project Selection**
- Strategic planning: L
- IT planning: H
- Feasibility studies: H

**Project Initiation**
- Project Manager role: L
- Charter, Deliverables, WBS: L
- MS Project orientation

**Analysis**
- Requirements: H
- Process Modeling (Data Flow Diagrams, Use Cases, Use Case diagrams, Activity diagrams): H
- Visio orientation
- CSV Pharmacy Service Improvement case

- Data Modeling (Analysis-level ERDs): H
- ITC eChoupal Initiative case (India)
Process Improvement & Automation Project
The project provides an opportunity to work with a client to initiate, plan, analyze, and prototype a small automated process improvement project. You will use the techniques and tools learned in class.

Selecting a Project
Each team (generally 3 - 5 members) selects their own process improvement project; often based on a team member’s internship, volunteer work, or current job. A few examples of successful process improvement & automation prototypes have been:

- **NonProfit:** Improved ticketing process (music society); improved volunteer tracking process (YMCA)
- **Supply Chain:** Optimized system that tracks material for bar promotions (liquor distributor); improved obsolete inventory write-off process (Fortune 250 company)
- **Sales & Marketing:** Improved web reservation process (resort villas); improved Viking ticket give-away process (bank); improve Metro Transit personalization (My Ride, Metro Transit).
- **Education:** Streamlined computer lab access (UM computer lab); improved new material intake process (UM special collection); automate resident assistance duty switch process (UM dorm)
- **Accounting:** Improved timesheet processing process (local software development company); improve elementary school fundraising processes (local elementary school)
- **Technical:** Improved network IP security tracking process (Fortune 250 company)

Project Deliverables
Each team will submit progress reports throughout the term culminating in final project presentations on December 10 and 12 (we usually invite corporate executives to serve as a real life audience)

The team project will be graded as follows:
- Project Proposal (1 – 3 pages)
- Project Plan (5 - 8 pages)
- Project Analysis Report, including DFDs and ERDs
- Final Report, including limited prototype implementation
- Final Presentation