



MIS 3504

# Digital Design and Innovation Studio

1: INTRODUCTION

Stephen Salvia

Photo: Installation by Jenny Holzer, US Pavillion, Venice Biennale 1990

**WELCOME BACK**

# Stephen Salvia

[slsnite@temple.edu](mailto:slsnite@temple.edu)

## Office Hours:

Wednesday/Thursday 6:00 PM – 7:00 PM

by phone 267.242.5439

Tuesday 8:00 PM 9:00 PM

after class MIS Department Office SP210

# course overview

This course is **required**

This course is demanding

There is a lot of work

Grading will be tough



Assume about 10% A's

This course is **DIFFERENT**

This course is a **STUDIO**

course objectives

# Primary Course Objectives

- Prepare you for the role of a modern Business Analyst
- Make you a thought leader
- Combine the strengths of Business Process Analysis with Design Inquiry to create Innovative Solutions

**BA + Design Inquiry = Innovative  
Solutions**

# Course Objectives: BA

- **Analyze** a business process and specify requirements for improving that process
- **Apply** information gathering techniques to elicit requirements which will be used to compose business and technical requirements.
- **Recommend** information systems solutions to improve or transform business processes.
- **Make** “as is” vs “to be” analyses, justify proposed process information systems solutions.
- **Implement** and negotiate changes to requirements.
- **Encourage** independent and CRITICAL THINKING

# Course Objectives: DESIGN

- **Understand** the shift from Quantitative to Qualitative thought
- **Learn** methods of User Centered / Ethnographic research
- **Learn** collaborative working methods
- **Learn** iterative working methods / experimentation
- **Think** and communicate visually
- **Provide** effective evaluation and CONSTRUCTIVE CRITICISM

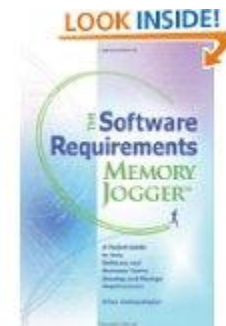
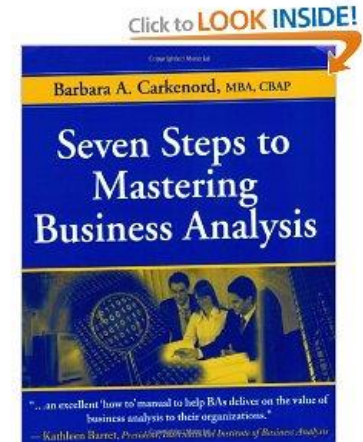
# Course Blog

<http://community.mis.temple.edu/mis3504Spring2015003>



# Text Books

- Carkenord, Barbara A., **Seven Steps to Mastering Business Analysis**, J. Ross Publishing, 2009, ISBN 978-1-60427-007-5.
- Ellen Gottesdiener, The Software Requirements Memory Jogger, 2005, ISBN1-57681-060-7



# Grading

Item	Percentage
Exam 1	20%
Exam 2	20%
Exam 3	20%
Individual case assignments and class participation	20%
Team Project	20%

# Exams (20% each)

- 3 exams
  - 55 minutes long
  - Multiple choice
  - Half covers all readings and class discussions
  - Half requires you to apply techniques
  - Graded 0-100%
  - Combined exams = 60% final grade

# Individual Work (20%)

- Project Scope
- Process Flow and Design
- Data Diagram
- Business Rules
- JustinMind assignment
- Class Participation

# Team Project (20%)

- Analysis of existing situation and proposal of a solution
- Produce a working prototype using Justinmind
- Accompanying documentation
- Team presentation
- Exercises and Assignments will help build your final submission
- Completeness and consistency are critical
- Personal project grades based on your performance, participation and peer evaluations

# Assignments

- All assignments are based on the project case and contribute towards its completion
- Listed in the syllabus by week due. Due on date indicated.
- Due at the beginning of class on paper.  
**Bring your work electronically also!**
- Several students each week will be randomly selected to present their work for review



[http://3.bp.blogspot.com/\\_oJiC4AmR4UU/S4FIHotJBJI/AAAAAAAAAhk/F2SumCCPquk/s640/2420328820\\_d4e152ae6e\\_o.jpg](http://3.bp.blogspot.com/_oJiC4AmR4UU/S4FIHotJBJI/AAAAAAAAAhk/F2SumCCPquk/s640/2420328820_d4e152ae6e_o.jpg)

# Classes

- **Bring your assignments**
  - Due at the START of class
  - Paper and ELECTRONIC\_formats
  - Random people will present their work
- **Come prepared to discuss and participate**
  - Classes will discuss and elaborate on readings, not review them
- **Class contributions**
  - Say your name before you share
  - You will be called upon to share your work
  - You will be asked questions
  - Lack of preparation will affect your grade
- **Classroom Etiquette**
  - **BE PRESENT**
  - Be on time
  - Cell phones off
  - Private discussions outside
  - Bring your computer but use it for class



We may have to make  
adjustments

# Schedule

Class	Topics	Individual Assignments	Team Assignments	Individual Deliverables due	Team Deliverables due	Reading assignment	Addition Material	Topic	Exams
1 1/13/2015	Introductions BA Role Project Client / Sponsor Introduction of JustinMind		Team Assignments Team Member Introductions Turn in Team roster			Seven Steps Chpt 1		Class 1.1	
2 1/20/2015	Requirements Stakeholders		In class team work assignment:		Requirements and Stakeholder submission	Seven Steps Chp 2 Jogger 1 - 28 Requirement overview Jogger 62 - 63 - Stakeholder Profiles	Warehouse Case_ StakeHolder Stakeholder Template	Class 1.2	
3 1/27/2015	Project Scope	Develop Scope from Warehouse case - Due class 4	Brainstorm on Project topics		Initial Project recommendations	Seven Steps Chp 3 Jogger 28 - 42 - Vision Statement	Dysfunctional Warehouse Case	Class 2.3	
4 2/3/2015	Elicit Requirements Interviews		Team meetings to discuss Project Topic	Turn in individual Warehouse scope	Project Topic Selecton	Seven Steps Chp 4 Jogger 43 - 49 - Elicit Requirements		Class 2.4	
5 2/10/2015	Process Flow Swim lane Flowchart	Assign Sales Order Case, develop process flow and design Due class 6	Team interviews with the Client Assign Team Project Scope Draft class 8			Seven Steps Chp6 - pages 232 - 235 Jogger122 - 126	Sales Order Case Swim lane template	Class 3.5	Exam 1 Chapter 1 , 2, 3 and 4
6 2/17/2015	Understanding Client Data Entities/Elements Introduce Project Case, Interviews	Assign Night Owl Case, develop Data and views Due class 7		Turn in individual Process Flow and Design	Turn in team project Scope	Seven Steps Chp6 pages 235 - 237 Jogger 183 - 189	Night Owl Case	Class 4.6	
7 2/24/2015	Developing Business Rules	Assign Gas Woks Case, develop business rules and design Due class 8	Client Interviews	Turn in Individual Night Owl Data Case		Jogger 204 - 215		Class 5.7	

# Schedule (continued)

Class	Topics	Individual Assignments	Team Assignments	Individual Deliverables due	Team Deliverables due	Reading assignment	Addition Material	Topic	Exams
3/3/2015	<b>Spring Break</b>								
8 3/10/2014	Design Thinking		Peer review Project Scope	Turn in Individual gas works case - Business rules Case		Seven Steps Chp 7		Class 6.8	
9 3/17/2015	Create persona, user stories Creating scenario Project Case Interviews		Assign Prototype development, data, business rule, process Due Class 10		Draft views of Data, Business rules and Process flows	Chp 6 Jogger 77 - 81		Class 7.9	
10 3/24/2015	Review Process Document Business rule - Project focus				Draft views of project persona(s) and Scenario(s)			Class 8.10	Exam 2 Chapter 4, 6 and 7
11 3/31/2015	Selling your ides Cross team review of scenario Cross team prototype review							Class 9.11	
12 4/7/2015	Group Presentation		Peer level reviews Develop Presentation		Prototype and Presentation			Class 10.12 Class 10.13	
13 4/14/2015	Team Presentations				Class Presentations				
14 4/21/2015	Presentation Reivews Exam 3				Final Project Materials due				Exam 3 - Prototyping

# Extra Credit

- 4 opportunities to earn extra credit points during the semester.
- Students are required to produce a prototype in Justinmind for each of the following class exercises:
  - Warehouse Scenario Prototype
  - Night Owl Data Prototype
  - Mortgage Program
  - Gas Company Prototype
- Students who submit prototypes that are **complete AND well done** will earn up to 1 point on their FINAL grade for each. (Maximum of 2 points total)

# How do I get an A?

1. Read the material before class
2. Come prepared to ask questions/discuss
3. Put effort into doing your assignments and team critiques
4. Take in-class exercises seriously
5. Study hard for the tests
6. Produce a great project solution and prototype
7. Impress me with the quality of your work
8. **TIMELINESS and ATTENDANCE**

Break 15 minutes

What is **Business Analysis**?

Who is the modern  
**Business Analyst**?

# What is Business Analysis?

“The set of tasks and techniques used to work as a liaison among stakeholders in order to understand the structure, policies, and operations of an organization and recommend solutions that enable the organization to achieve its goals”

- The International Institute of Business Analysis (IIBA)



# Business Analysis Involves...

- **Identification** of business problems and opportunities
- **Elicitation** of needs and constraints from stakeholders
- **Analysis** of stakeholder needs to define requirements for a solution
- **Assessment** and validation of potential and actual solutions
- **Management** of the “product” or requirements scope

“BAs with an IT background are very **analytical** individuals . . . ”

- B. Carkenord from Seven Steps to Mastering Business Analysis, p 8.

“As a DESIGNER, I am much better at **synthesis** than analysis . . . ”

- Bill Moggridge from Designing Interactions, p 725.

**analysis** the separating of any material or abstract entity into its constituent elements ( opposed to synthesis)

**synthesis:** the combining of the constituent elements of separate material or abstract entities into a single or unified entity (opposed to analysis)

- From <http://dictionary.reference.com/>

analysis: PULLS IT APART

synthesis: PUTS IT TOGETHER

Business analysis and Design  
provide a balanced approach

# What are the traits of the most successful business analysts?



- Analysts enjoy learning things and have a rare combination of the ability to see both the big picture while also being very detail oriented.
- Excellent “people skills” – strong listening skills. Good at asking questions and probing for missing information. Good leadership skills.
- Strong technical awareness – Understands all facets of software development.
- Constantly working on improving their skill set.
- Creativity

# Why would anyone want to be a BA?

- You like technology, but not so much that you want to do it all the time.
- You like solving problems
- You like working with people and understanding their needs and concerns
- You get bored easily doing the same thing over and over
- Inefficiency and lack of effectiveness annoy you

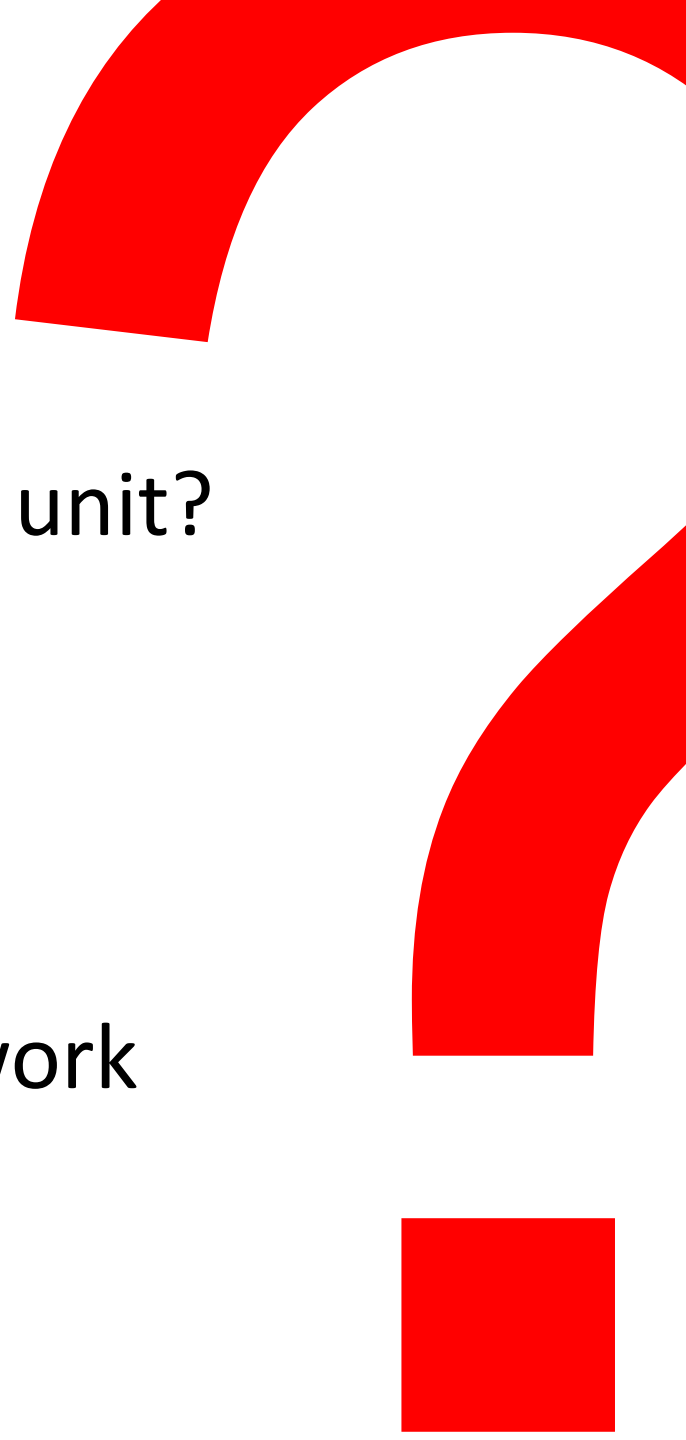
And...

# Business Analyst Career Path

Title	Experience	Tasks
Junior Business Analyst	0-2 years; may have business experience or IT development experience	Elicit and document requirements for small, well-defined projects, often changes to existing systems. Ideally works with a BA mentor <b>\$55-60,000</b>
Business Analyst	2-5 years	Elicit, analyze, and document requirements for medium to large projects. Works with the project manager to scope new projects <b>\$77,000+</b>
Lead or Senior Business Analyst	5-10 years	Elicit, analyze, and document requirements for large, complex, mission-critical projects. Supervises/mentors junior Bas. Works with the business to initiate and define new projects. <b>\$89,000+</b>
Business Consultant/Client Relationship Manager	10+ years	Assist the business with strategic planning, business case development, and new product implementations. Helps to identify projects. Sets up and manages a business analyst center of excellence <b>Average salaries from Indeed.com</b>



- Where do business analysts come from, IT or a business unit?
- Which is better?
- Who do business analysts work for, IT or a business unit?



# Summary: Basic Model

## Events Trigger

- Opportunities
- Problems

## Steps

- 1 Analysis of the event– Ask the right questions
- 2 Design a solution – What are the possibilities
- 3 Implementation - Build/implement the solution

# team formation

- 1 select a team liaison
- 2 exchange contact information
- 3 Liaison emails to me [slsnite@temple.edu](mailto:slsnite@temple.edu)

Team Name

Team Number

List of members

# Introductions

Who am I?

# The Two Minute Presentation

- Short and concise summary
- Two minutes is just right
- Situational
  - Biographical background for recruiters
  - Personal & project background when meeting subject matter experts
  - Project summary for leadership (elevator speech)
- Write it out if you want

Who are **YOU**?

# 2 Minute Presentation Exercise

- Sit with your team
- Take 5 minutes to prepare your 2 minute biography
- Cover key points (situational)
  - Where are you from?
  - Any background information you might want to include
  - What brought you to Temple?
  - What made you want to major or minor in MIS?
  - What are you looking to do when you graduate?
  - What are your other strengths and interests?
- Each team member presents their 2 minute biographies



Congratulations!  
You are now a team.

What do you want to learn  
from the interview with a  
project sponsor?



# Questions should be:

- Broad to start
- Appropriate for the person being interviewed
- Start general then more specific
- Open-ended

As a team:

Prepared questions (in writing) in priority order

# JustInMind

1. **Download** trial program from website [<http://www.justinmind.com/>]  
Prototyper Pro Edition 6.1
2. **Access** your license key
3. **Unlock** the full version of the program
4. **Learn** how to use it

**END**