



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

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Office Hours:

Monday / Wednesday evenings 6:00 PM – 7:30 PM

by phone 267.242.5439

Tuesday evening 8:00 PM 9:00 PM - after class

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

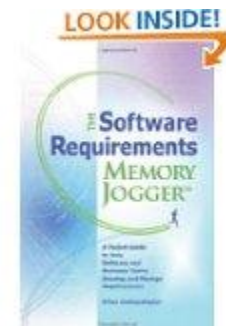
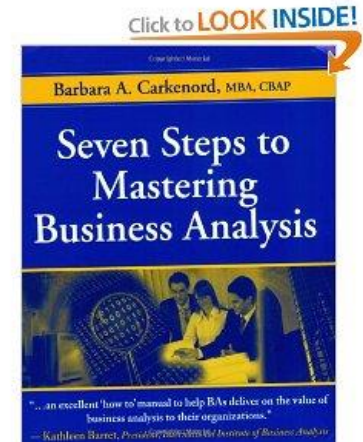
- **Understand** the shift from Quantitative to Qualitative thought
- **Learn** methods of User Centered / Ethnographic research
- **Learn** collaborative working methods
- **Learn** iterative working methods / experimentation
- **Think** and communicate visually
- **Provide** effective evaluation and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

Course Blog

<http://community.mis.temple.edu/mis3504fall2015003>

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



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

MIS3504 Fall 2015 Class Schedule and Deliverables

| Class | Topics | Individual Assignments | Team Assignments | Individual Deliverables due | Team Deliverables due | Reading assignment | Addition Material | Topic | Exams |
|----------------|---|--|---|--|--|--|--|-----------|-------------------------------------|
| 1 8/25/2015 | 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 9/1/2015 | Requirements Stakeholders | | In class team work assignment: | | Requirements and Stakeholder exercise | Seven Steps Chp 2 Jogger 1 - 28 Requirement overview Jogger 62 - 63 - Stakeholder Profiles | Warehouse Case_ StakeHolder Stakeholder Template | Class 1.2 | |
| 3 9/8/2015 | Project Scope | Develop Scope from Warehouse case - Due class 4 | Team Studio work: Brainstorm on Project topics | | Initial Project Topic and problem statement | Seven Steps Chp 3 Jogger 28 - 42 - Vision Statement | Dysfunctional Warehouse Case | Class 2.3 | |
| 4 9/15/2015 | Elicit Requirements Interviews | | Team Studio work: Meetings to discuss Project Topic | Turn in individual Warehouse scope | Finalized Project Topic and problem statement | Seven Steps Chp 4 Jogger 43 - 49 - Elicit Requirements | | Class 2.4 | |
| 5 9/22/2015 | Process Flow Swim lane Flowchart | Assign Sales Order Case, develop process flow and design Due class 6 | Team Studio work: Develop interview questions and stakeholder identification for Project Scope | Turn in JustinMind Prototype Introduction Lab1 | Turn in team project Scope (Draft) | 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 9/29/2015 | Understanding Client Data Entities/Elements Introduce Project Case, Interviews | Assign Night Owl Case, develop Data and views Due class 7 | Team studio work: Mock interviews Scope refinements if required | 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 10/6/2015 | Developing Business Rules | Assign Gas Woks Case, develop business rules and design Due class 8 | Team studio work: Mock interviews Current State analysis | Turn in Individual Night Owl Data Case | | Jogger 204 - 215 | | Class 5.7 | |

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|------------------|--|------------------------|---|---|---|-------------------------|-------------------|----------------------------|---------------------------|
| 8 10/13/2014 | Design Thinking | | Team studio work: Mock interviews Future State Design | Turn in Individual gas works case - Business rules Case | | Seven Steps Chp 7 | | Class 6.8 | |
| 9 10/20/2015 | Create persona, user stories Creating scenario Project Case Interviews | | Team studio work: Mock interviews Future State Design | Turn in JustinMind Prototype Introduction Lab 2 | Current State Draft views of Data, Business rules and Process flows | Chp 6 Jogger 77 - 81 | | Class 7.9 | |
| 10 10/27/2015 | Review Process Document Business rule - Project focus | | Team studio work: Prototype Design | | Draft views of project persona(s) and Scenario(s) | | | Class 8.10 | Exam 2 Chapter 4, 6 and 7 |
| 11 11/3/2015 | Selling your ideas Cross team review of scenario Cross team prototype review | | Team studio work: Prototype Design | | | | | Class 9.11 | |
| 12 11/10/2015 | Group Presentation | | Peer level reviews Develop Presentation | | Draft views of Prototype and Presentation | | | Class 10.12 Class 10.13 | |
| 13 11/17/2015 | Team Presentations | | | | Class Presentations | | | | |
| 11/24/2015 | Thanksgiving Break | | | | | | | | |
| 14 12/11/2015 | Team Presentations | | | | Class Presentations Final Project Materials due | | | | |
| 12/8/2015 | Study Day | | | | | | | | |
| 15 12/15/2015 | Exam 3 | | | | | | | | 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?

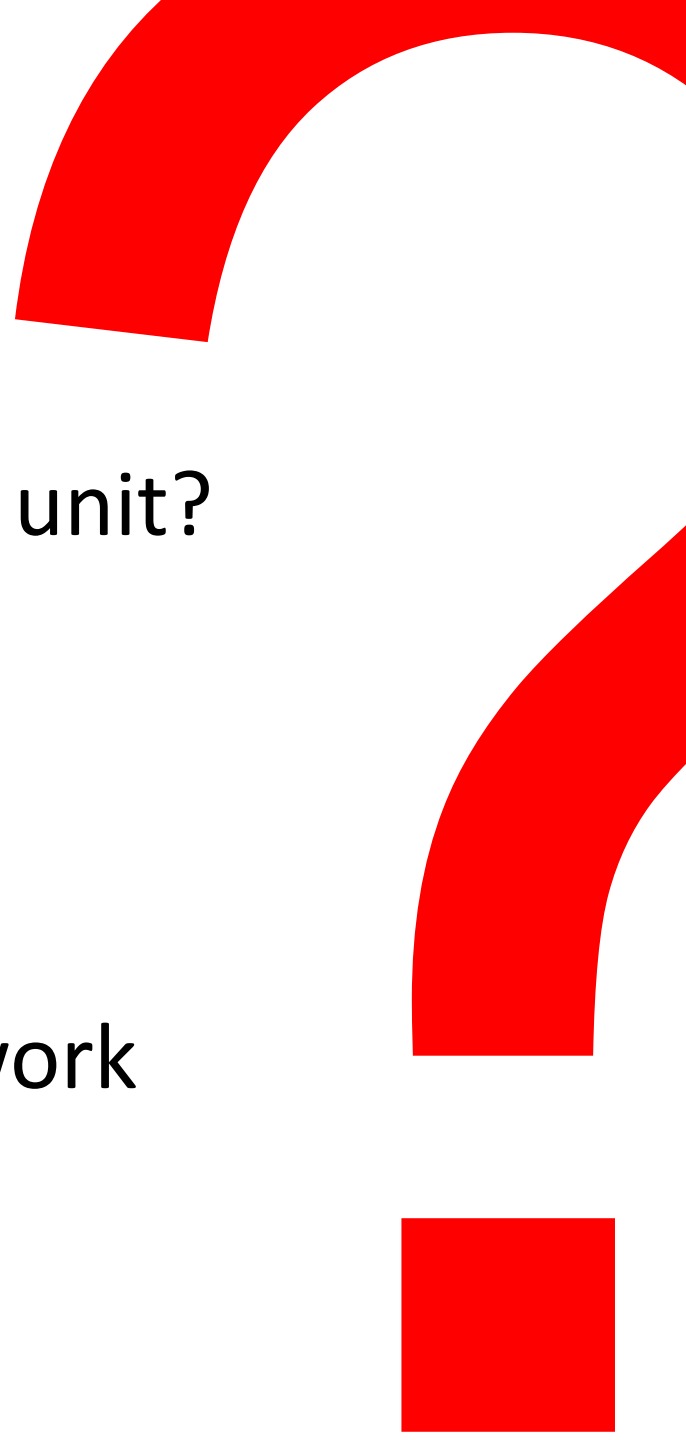
- You like technology, but not so much that you want to do it all the time.
- You like solving problems
- You like working with people and understanding their needs and concerns
- You get bored easily doing the same thing over and over
- Inefficiency and lack of effectiveness annoy you

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 \$55-60,000 |
| Business Analyst | 2-5 years | Elicit, analyze, and document requirements for medium to large projects. Works with the project manager to scope new projects \$77,000+ |
| 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. \$89,000+ |
| 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 Average salaries from Indeed.com |

- 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

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 6.6
2. **Access** your license key
3. **Unlock** the full version of the program
4. **Learn** how to use it

END