



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 **work**

Individual Assignments

Group Assignments

Team Project

Exams

Assignments will be **Challenging**

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

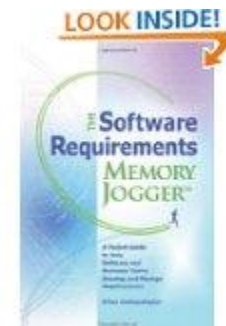
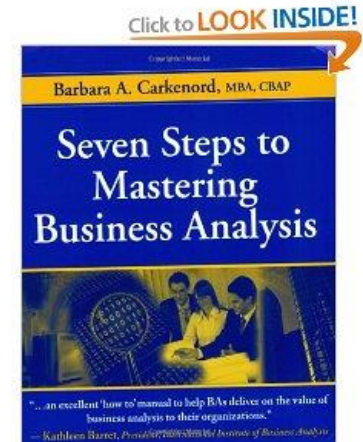
- **Understand** the shift from Quantitative to Qualitative thought
- **Learn** methods of User Centered / Ethnographic research
- **Learn** collaborative working methods
- **Learn** iterative working methods / experimentation
- **Think** and communicate visually
- **Provide** effective evaluation and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

Course Blog

<http://community.mis.temple.edu/mis3504spring2019003>

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(s)
- 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



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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 Section 3 - Spring 2019 Class Schedule and Deliverables

Class	Topics	Individual Assignments	Team Assignments	Individual Deliverables due	Team Deliverables due	Reading assignment	Addition Material	Exams
1 1/15/2019	Introductions BA Role Project Client / Sponsor Introduction of JustinMind		Team Assignments Team Member Introductions Turn in Team roster			Seven Steps Chpt 1		
2 1/22/2019	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	
3 1/29/2019	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	Modern Electronics / Distribution Warehouse Case – Project Scope	
4 2/5/2019	Elicit Requirements Interviews	Assign JustinMind Prototype Lab 1	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		
5 2/12/2019	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	Discount Auto Parts – Sales Order Case – Process Flow Swim lane template	Exam 1 Chapter 1 , 2, 3 and 4
6 2/19/2019	Understanding Client Data Entities/Elements Introduce Project Case, Interviews	Assign Data Analysis, develop Data and views Due class 7	Team studio work: Mock interviews Scope refinements if required	Turn in individual Process Flow and Design	In Class review and revise (Draft) scope	Seven Steps Chp6 pages 235 - 237 Jogger 183 - 189	Solutions-Plus Client Project Data Analysis ERD SpreadSheet	
7 2/26/2019	Developing Business Rules	Assign Decision Tree Case, develop business rules and design Due class 8	Team studio work: Mock interviews Current State analysis	Turn in Individual Solutions Plus - Data Analysis Case	Turn in revised team project Scope	Jogger 204 - 215	We Sell All Cars – Decision Tree Case Business Rules Template	
3/5/2019	Spring Break							

Schedule

MIS3504 Section 3 - Spring 2019 Class Schedule and Deliverables

Class	Topics	Individual Assignments	Team Assignments	Individual Deliverables due	Team Deliverables due	Reading assignment	Addition Material	Exams
8 3/12/2019	Design Thinking	Assign JustinMind Prototype Lab 2	Team studio work: Mock interviews Future State Design	Turn in Individual - Business rules Case		Seven Steps Chp 7		
9 3/19/2019	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		
10 3/26/2019	Review Process Document Business rule - Project focus		Team studio work: Prototype Design		Draft views of project persona(s) and Scenario(s)			Exam 2 Chapter 4, 6 and 7
11 4/2/2019	Selling your ideas Cross team review of scenario Cross team prototype review		Team studio work: Prototype Design		Future State Draft views of Data and Process flows			
12 4/9/2019	Group Work		Peer level reviews Develop Presentation		Draft views of Prototype and Presentation			
13 4/16/2019	Team Presentations				Class Presentations			
14 4/23/2019	Team Presentations				Class Presentations (overflow) Final Project Materials due			Exam 3 - Prototyping (time permitting)

Break 10 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?

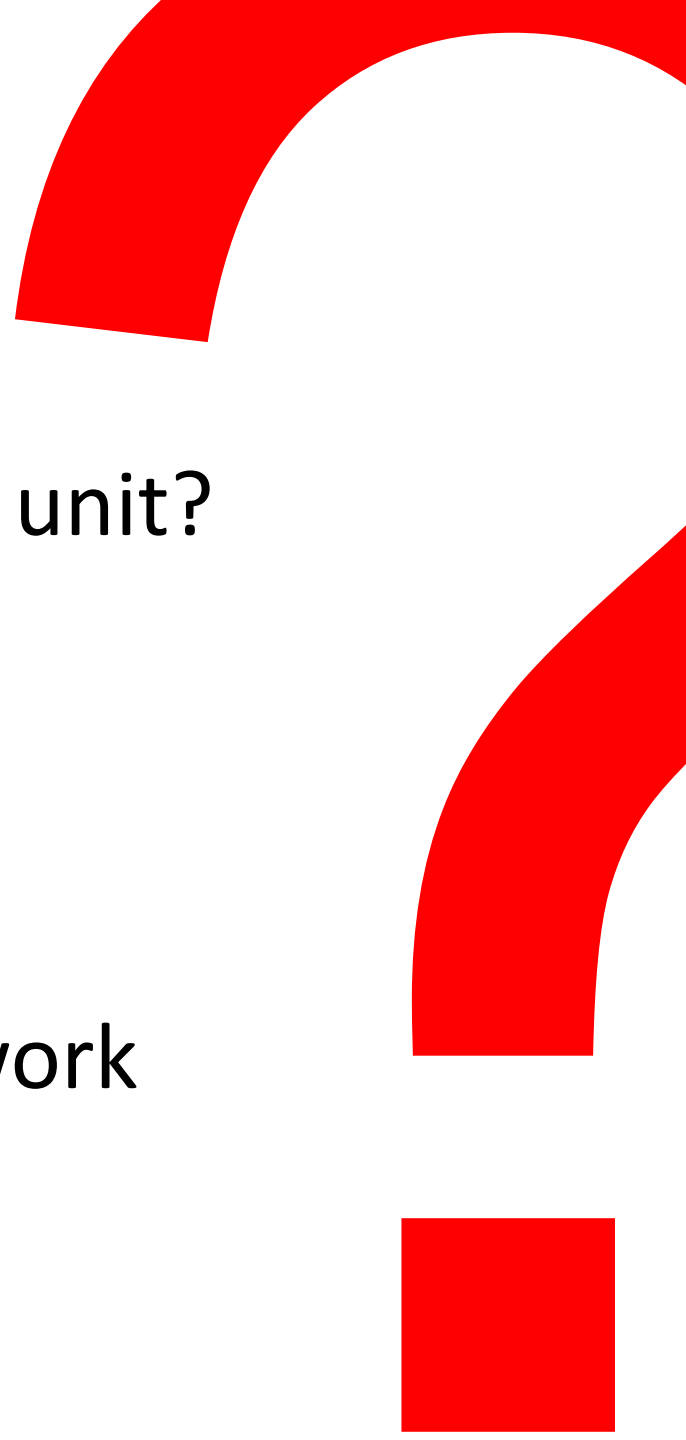
- You like technology, but not so much that you want to do it all the time.
- You like solving problems
- You like working with people and understanding their needs and concerns
- You get bored easily doing the same thing over and over
- Inefficiency and lack of effectiveness annoy you

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

Framework: Tools

Tool: a device or implement, used to carry out a particular function
implement, utensil, instrument, device, apparatus, gadget, appliance, machine, contrivance, contraption, gizmo

Framework: the ideas, information, and principles that form the structure of an organization or plan

Framework and tools for your innovation project:

- Scope the work
 - What is the game plan
- Analysis / Document the current state
 - Understand the Business Requirement and how the work gets done (functional)
 - Tools: Process flow, Data Views Business Rule, Decision trees
- Design a solution to resolve issue or address opportunity
 - Team collaboration
 - Tools – personas, scenarios, evaluation, prototypes
- Document Future state with new design
 - How does the solution change the way work gets done (functional)
 - Are the Business requirement still being met
- Sell solution to sponsor
 - Presentation
 - Demonstration

Requirements:

Core Business Requirements vs Functional Requirements:

- **What** tasks need to be performed to operate
 - Core Business Requirements
 - Analysis

- **How** will the task be completed
 - Functional Requirements
 - Design

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 8.2
2. **Access** your license key
3. **Unlock** the full version of the program
4. **Learn** how to use it

END