

DSO433 Business Technology Process Design

Syllabus – Spring 2017 MW 2-3:50 4 units, BRI 202A

Professor: Dr. Ann Majchrzak Office: BRI401C

Email contact: majchrza@usc.edu: Office Hours Wednesdays 4-5pm

Teaching Assistant: Ms. Yao Sun Email contact: yaosun@usc.edu

Course Description

Learn the skills to become a business process and systems analyst, and a management consultant for implementing technical-organizational change.

Learning Objectives

- Identify ways to improve business processes
- Develop use cases for information systems design to support improved business processes
- Apply use cases to create an information systems application
- Identify tools for high-fidelity prototyping
- Identify processes to outsource
- Conduct user experience based design
- Become a liaison between technology developers and lines of business to prepare organization for digital transformation

A course may have approximately between 5 and 10 Learning Objectives.

Required Materials

Dennis Wixom and Tegarden. <u>Systems Analysis and Design: An Object-Oriented Approach with UML</u> 5th Edition (no other editions permitted). Wiley, 2015. Can be purchased from Wiley

The cheapest version is accessible from:

https://www.vitalsource.com/referral?term=9781119030263 Become comfortable with the online resources provided for text from Wiley: http://bcs.wiley.com/he-bcs/Books?action=index&itemId=1118804678&bcsId=9422

Individual readings not in the text will be uploaded to Blackboard

Prerequisites and/or Recommended Preparation:

No prerequisites

Course Notes:

Copies of lecture slides and other class information will be posted on Blackboard.

ASSIGNMENTS AND GRADING

Weekly Journals describing a practice you learned for this week and how to apply it in a separate business context from the context in which it was originally described to improve the likelihood of successfully completing a business-technology process design in a company. Graded as check plus, check, or check-minus. Check plus is completely correct answer; check is a partially correct answer, & check-minus is either not turned in or completely wrong or turned in late. Weekly journals are to be uploaded on Blackboard Fridays 5pm.

The 32 students will be divided into 6 Discussion Leader Groups of 5 each and given Group# 1-6. All members of each Discussion leader Group is expected to lead 2 10-minute discussion with 5 other members of the class. The 2 discussions are: an assigned "Your Turn" in an effort to generate different points of view on the Your Turn, and then report out on the differences of opinion; and sharing a current event with 5 other members of the class which was selected because it is related to the material to be covered that day with the discussion getting non-group members to explain how the topic is related to the current event, with a nonmember reporting out to the class. Assignments as to when each Discussion Leader Group is responsible is included in the course outline.

Assignments (example)	<u>% of Grade</u>
4 glossary quizzes (10% each)	40%
Final Project turn-in(in groups of 5)	15%
Project deliverables met on time to share with class	10%
Weekly Journals (15 weeks)	15%
Discussion Leadership generated a different point of view	5%
Current events nicely find connections with topics	5%
Participation	<u>10%</u>
TOTAL	100.0%

There is a project described in Appendix A. The project is a group project with a peer evaluation expected at the end and a grade down in the class if peers have decided that an individual has not contributed equally. There are expected deliverables along the way throughout the semester; meeting them is part of your grade. Go to Blackboard to add your profile, and then sign up on the discussion group to join a 5-person project team.

Participation refers to evidence that the prep reading for that day has been accomplished and evidence of ALWAYS being on task and NEVER using technology to do non-class work.

Final grades represent how you perform in the class relative to other students. Your grade will not be based on a mandated target, but on your performance. Historically, the average grade for this class is about a B. Three items are considered when assigning final grades:

- 1. Your average weighted score as a percentage of the available points for all assignments (the points you receive divided by the number of points possible).
- 2. The overall average percentage score within the class.
- 3. Your ranking among all students in the class.

ADDITIONAL INFORMATION

Add/Drop Process

If you are absent more than 5 times by the last day to withdraw with a grade of W, I will ask you to withdraw from the class by that date.

Technology Policy

Laptop and Internet usage is not permitted during academic or professional sessions unless otherwise stated by the respective professor and/or staff. Use of other personal communication devices, such as cell phones, is considered unprofessional and is not permitted during academic or professional sessions. ANY e-devices (cell phones, PDAs, I-Phones, Blackberries, other texting devices, laptops, I-pods) must be completely turned off during class time. Upon request, you must comply and put your device on the table in off mode and FACE DOWN. You might also be asked to deposit your devices in a designated area in the classroom. Videotaping faculty lectures is not permitted due to copyright infringement regulations. Audiotaping may be permitted if approved by the professor. Use of any recorded or distributed material is reserved exclusively for the USC students registered in this class.

Academic Integrity and Conduct

USC seeks to maintain an optimal learning environment. General principles of academic honesty include the concept of respect for the intellectual property of others, the expectation that individual work will be submitted unless otherwise allowed by an instructor, and the obligations both to protect one's own academic work from misuse by others as well as to avoid using another's work as one's own (plagiarism). Plagiarism – presenting someone else's ideas as your own, either verbatim or recast in your own words – is a serious academic offense with serious consequences. All students are expected to understand and abide by the principles discussed in the *SCampus*, the Student Guidebook (<u>www.usc.edu/scampus</u> or <u>http://scampus.usc.edu</u>). A discussion of plagiarism appears in the University Student Conduct Code (section 11.00 and Appendix A).

Students will be referred to the Office of Student Judicial Affairs and Community Standards for further review, should there be any suspicion of academic dishonesty. The Review process can be found at: <u>http://www.usc.edu/student-affairs/SJACS/</u>. Failure to adhere to the academic conduct standards set forth by these guidelines and our programs will not be tolerated by the USC Marshall community and can lead to dismissal.

Discrimination, sexual assault, and harassment are not tolerated by the university. You are encouraged to report any incidents to the *Office of Equity and Diversity* <u>http://equity.usc.edu/</u> or to the *Department of Public Safety* <u>http://dps.usc.edu/contact/report/</u>. This is important for the safety of the whole USC community. Another member of the university community – such as a friend, classmate, advisor, or faculty member – can help initiate the report or can initiate the report on behalf of another person. *Relationship and Sexual Violence Prevention and Services* (RSVP) <u>https://engemannshc.usc.edu/rsvp/</u> provides 24/7 confidential support, and the sexual assault resource center webpage <u>https://sarc.usc.edu/reporting-options/</u> describes reporting options and other resources.

Support Systems

Students whose primary language is not English should check with the *American Language Institute* <u>http://dornsife.usc.edu/ali</u>, which sponsors courses and workshops specifically for international graduate students. *The Office of Disability Services and Programs* (<u>www.usc.edu/disability</u>) provides certification for students with disabilities and helps arrange the relevant accommodations. If an officially declared emergency makes travel to campus infeasible, *USC Emergency Information* (<u>http://emergency.usc.edu/</u>) will provide safety and other updates, including ways in which instruction will be continued by means of blackboard, teleconferencing, and other technology.

Students requesting test-related accommodations will need to share and discuss their DSP recommended accommodation letter/s with their faculty and/or appropriate departmental contact person at least three weeks before the date the accommodations will be needed. Additional time may be needed for final exams. Reasonable exceptions will be considered during the first three weeks of the semester as well as for temporary injuries and for students recently diagnosed. Please note that a reasonable period of time is still required for DSP to review documentation and to make a determination whether a requested accommodation will be appropriate.

(https://sait.usc.edu/academicsupport/centerprograms/dsp/registration/accommodationletters_how to.asp

The Office of Disability Services and Programs (<u>www.usc.edu/disability</u>) provides certification for students with disabilities and helps arrange the relevant accommodations. Any student requesting academic accommodations based on a disability is required to register with Disability Services and Programs (DSP) each semester. A letter of verification for approved accommodations can be obtained from DSP. Please be sure the letter is delivered to me (or to your TA) as early in the semester as possible. DSP is located in GFS (Grace Ford Salvatori Hall) 120 and is open 8:30 a.m.–5:00 p.m., Monday through Friday. The phone number for DSP is (213) 740-0776. Email: abil-ity@usc.edu.

In case of a declared emergency if travel to campus is not feasible, the USC Emergency Information web site (<u>http://emergency.usc.edu/</u>) will provide safety and other information, including electronic means by which instructors will conduct class using a combination of Blackboard, teleconferencing, and other technologies.

Please make sure you can access this course in Blackboard and retrieve the course syllabus and other course materials electronically. You should check Blackboard regularly for announcements and new materials. In the event of an emergency, the ability to access Blackboard will be crucial. USC's Blackboard learning management system and support information is available at <u>blackboard.usc.edu</u>.

	Topics/ Daily Activities	Readings and Homework	Deliverables and Due Dates	Group # and Assignment
Class 1 Week 1 Mon 01/09	The context for busi- ness technology pro- cess design: IoT, busi- ness process outsourc- ing, SaaS, Business Process Management, SOA			
Week 2 Class 2 Wed 01/11	What is Business Technology Process Design: Case of the Metro		Weekly journal due Friday 5pm	
Week 2 Mon	OFF			

COURSE CALENDAR/READINGS/CLASS SESSIONS

01/16				
Class 3 Wed 01/18	Why is business pro- cess so hard: so many method choices	Chapter 1, p1-16 + Chapter 1 for Patterson with Questions	Weekly journal due Friday 5pm	<mark>Your Turn</mark> (BB) Disc: Grp 1
Week 3 Class 4 Mon 01/23	Why is business pro- cess design so hard: so many risks; so many unknowns	Chapter 2 p 45-58 + Chapter 2 for Patterson with Questions		Current Event: Grp 6
Week 3 Class 5 Wed 01/25	Why is business pro- cess design so hard: Change Management	Chapter 13, p489-496	Weekly journal due Friday 5pm	<mark>Your turn</mark> (<mark>BB)</mark> Disc: Grp 2
Week 4 Class 6 Mon 01/30	Opportunities guiding business-IT change, and threats not chang- ing → High level business requirements → Systems Request; intro to project; Speaker: Sonya Sepahban	BB: How to create an information strategy Guest speaker: Sonya Sepahban (check out Linked-In profile). Chapter 2, p41-45 GLOSSARY QUIZ #1 (RELEVANT READ- ING FROM CHAPS 1,2,13)	Register for join- in.la	
Week 4 Class 7 Wed 02/01	From High-level busi- ness requirements to specific requirements: rest of semester! & Requirements Gather- ing (i.e., assuming others' know reqs) Obs exercise in or walk outside; Doc analysis exercise in class	Chapter 3 p86-91, p. 95-108 Chapter 3 for Patterson with Questions	Weekly journal due Friday 5pm	Current Event: Grp 5
Week 5 Class 8 Mon 02/06	Requirements Gather- ing continued JAD exercise; inter- view exercise	BB: Joint Application Design		
Week 5 Class 9 Wed 02/08	Requirements Analy- sis (i.e., reqs need to be discovered): Benchmarking, Mar- ket analysis of needs, User Stories, Intro to business process mod- eling (BPR, BPA, BPI). User Stories from market analysis exercise using Mar- shall Electronics Re- sources	Chapter 3: p. p92-95; p110-114	Weekly journal due Friday 5pm	Your turn (BB) Disc: Grp 3

Week 6 Class 10	Speaker: Shawn Fer- guson, Capital Group (formerly TIAA): BP Architecture & Select-	BB: Eight steps to a successful business process reengineering effort	HAVE COM- MUNITIES & TEAM SE- LECTED FOR	
Mon 02/13	ing the right business process to model		PROJECTS	
Week 6 Class 11 Wed 02/15	Business Process Modeling Exercise with BPM	Ch 4: p129-140	Weekly journal due Friday 5pm	<mark>Your turn</mark> (BB) Disc Grp 4
Week 7 Mon 02/20	OFF		MEET WITH COMMUNITY MEMBERS	
Week 7 Class 12 Wed 02/22	Business Process Modeling (con't). Exercise	Chapter 4 for Patterson with Questions	Weekly journal due Friday 5pm	
Week 8 Class 13 Mon 02/27	From As-Is to To-Be more exercises. Work on To-BE in class	BB: Business Process Reengineering: All you Need to Know GLOSSARY QUIZ #2: READINGS	BRING IN DRAFT TO-BE to work on in class	MEET WITH SONYA OUTSIDE OF CLASS
Week 8 Class 14 Wed 03/01	Closing the As-IS to To-BE gap: Conver- sion	Ch 13, p485-488 and revisiting Change Management in Ch 13	Weekly journal due Friday 5pm	
Week 9 Class 15 Mon 03/06	Use Cases In class exercises	Ch 4 p121-128	DRAFT PRO- JECT SYSTEM REQUEST FORM DUE	
Week 9 Class 16 Wed 03/08	Use Cases cont and Use Case flows/description In class exercises	Ch 4, p140 to end Chapter 4 for Patterson with Questions	Weekly journal due Friday 5pm	Current Event Disc Grp 4
		SPRING BREAK		
Week 10 Class 17 Mon 03/20	Use Case Diagrams Lots of in class exer- cises		Bring in DRAFT PROJECT USE CASE DIA- GRAMS to work on in class	
Week 10 Class 18 Wed 03/22	Moving to Design: OOAD	Ch 1, p 23-27	Weekly journal due Friday 5pm	
Week 11 Class 19 Mon 03/27	OOAD cont	Ch 5, 6 Chapter 5, 6 for Patter- son with Questions		Your turn (BB) Disc Group 5

Week 11 Class 20 Wed 03/29	Evolving technical design	GLOSSAY QUIZ #3 (readings) Chapter 7: p257-267	Weekly journal due Friday 5pm	
Week 12 Class 21 Mon 04/03	Reuse/Services	Ch 8 Chapter 8 for Patterson with Questions		<mark>Your Turn</mark> (BB) Disc Grp 6
Week 12 Class 22 Wed 04/05	Design Strategies for Technology	Ch 7: p268-276 Chapter 7 for Patterson with Questions	Weekly journal due Friday 5pm	
Week 13 Class 23 Mon 04/10	UX Design and the Future of Storytelling: Thomas Jorion from Havas			
Week 13 Class 24 Wed 04/12	Rapid Prototyping with Snappi		Weekly journal due Friday 5pm Register for Snappi	
Week 14 Class 25 Mon 04/17	Creating a Business Case for your business process-technology change: Pulling it all together	Bb: Simple framework to translate IT benefits		Current Event Disc Grp 3
Week 14 Class 26 Wed 04/19	Additional Uses of business process de- sign: Knowledge Pro- cess Outsourcing and Robotic Automation	BB: KPO BB: Market Guide for Robotic Process Auto- mation BB: Achieving excel- lent BPO	Weekly journal due Friday 5pm	Current Event Disc Grp 2
Class 27 Mon 04/24	Future of business process Design: IoT, intelligent, dynamic and event-driven; BPM of Things	GLOSSARY QUIZ#4 BB: Experience report from Swiss Bank on BPM		Current Event Disc Grp 1
Week 15 Class 28 Wed 04/26	Project Presentations		Weekly journal due Friday 5pm	
FINAL	Project reports due			

Please note: The date/time of the Final Exam is determined by the University. For the date and time of the final for this class, consult the USC *Schedule of Classes* at <u>www.usc.edu/soc</u>. Select the corresponding semester to view and click on the "Final Examinations Schedule" link on the left side of the screen.