BEMIDJI STATE UNIVERSITY

COLLEGE OF BUSINESS, TECHNOLOGY AND COMMUNICATION Course Syllabus *FALL 2012-*

COURSE: System Analysis and Design - (BUAD 3384)

COURSE CREDIT: 3.0 Credit Hours

INSTRUCTOR: Mehdi S. Tehrani (PhD)

OFFICE LOCATION: Decker Hall- Room 25

OFFICE HOURS: M,W,F, 9.40-10am,12-13:00, 15.00:00-17.00:00

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ADDRESS: 1500 Birchmount Drive, NE, Bemidji, MN 56601.

CLASS LOCATION: DH15

CLASS SCHEDULE: MWF, 14:00-14:50 pm

FIRST DAY OF CLASS: Monday August 27th, 2012

LAST DAY OF CLASS: Monday Dec 10th 2012

PREREQUISITE: BUAD 2280 / CS1141

REQUIRED TEXTBOOK: Title: Systems Analysis and Design Methods

Author: J.Whitten et al.

Year: 7th edition, 2007 Publisher: McGraw-Hill ISBN: 13 9780073052335

 $\underline{http://catalogs.mhhe.com/mhhe/viewProductDetails.do?isbn=0073052337}$

EXTERA READING:

1- Systems Analysis & Design in a Changing World by Satzinger et al, 2009.

COURSE DESCRIPTION:

Information Systems Analysis discusses the tools, techniques, and methodologies required to successfully create the conceptual design for an information system. More specifically, we will discuss:

- 1. what it takes to be a systems analyst,
- 2. how to manage the information systems project,
- 3. what methods, tools, and techniques are used to analyze the system request,
- 4. how a systems development life cycle guides the analysis process,
- 5. how to determine the system requirements and create a feasibility report,
- 6. how to model the existing and new system, and
- 7. how to select the best alternative design strategy.

LEARNING OOUTCOMES:

Any student who completes BUAD 3384 should be able to

- 1. participate as an effective member of group team (DSLO#4),
- 2. use Visible Analyst Academic Version or MS Project to plan and manage an information systems development project(DSLO#3, DSLO#2),
- 3. use business documents (mission, goals, and objectives) to evaluate the system service request (DSLO#1),
- 4. create a statement of work in response to the system service request (DSLO#5),
- 5. create appropriate techniques to determine the system requirements and analyze the business processes (DSLO#5),
- 6. determine appropriate alternatives and guidelines to evaluate and compare when preparing a feasibility study (DSLO#1).
- 7. create a baseline project plan detailing the project, feasibility assessment, and management issues (DSLO#4,5).
- 8. use a CASE tool to develop the process and data model, (DSLO#3)
- 9. present findings in a professional manner to the client (DSLO#4).

Learning outcomes	Measures		
System analysis and design concepts	Reading chapters, take quizzes, and Hands-on		
	experience, Discussion, Final exam		
Using software (Visible or MS project)	Doing cases/projects, and Hands-on		
	experience,		
analyze and solve business problems	Read chapters, do projects, discussion and		
	group presentation		
Present findings in a professional manner	do cases and present them		

COURSE DESCRIPTION:

Part One The Context of Systems Development Projects

- 1 The Context of Systems Analysis and Design Methods
- 2 Information System Building Blocks
- **3 Information Systems Development**
- **4 Project Management**

Part Two Systems Analysis Methods

- **5 Systems Analysis**
- **6 Fact-Finding Techniques for Requirements Discovery**
- 7 Modeling System Requirements with Use Cases
- 8 Data Modeling and Analysis
- 9 Process Modeling
- 10 Object-Oriented Analysis and Modeling Using the UML
- 11 Feasibility Analysis and the System Proposal

Part Three Systems Design Methods

- **12 Systems Design**
- 13 Application Architecture and Modeling
- **14 Database Design**
- 15 Output Design and Prototyping
- 16 Input Design and Prototyping
- 17 User Interface Design
- 18 Object-Oriented Design and Modeling Using the UML

Part Four Beyond Systems Analysis and Design

19 Systems Construction and Implementation

20 Systems Operations and Support

LECTURE SCHEDULE:

Tentative Schedule

Date	Topic			
Week 1	-			
8/27	Review the Syllabus & sign onto D2L Course Web Site			
8/29,31	Lecturing chapter-1			
Week 2				
9/3	Lecturing Chapter-1			
9/5, 9/7	Assign projects, quiz, de group projects presentation			
Week 3	Assign projects, quiz, do group projects + presentation			
9/10				
9/12, 14	Lecturing Chapter-2			
Week 4				
9/17	Lecturing Chapter-2			
9/19, 21	Assign projects, quiz, do group projects + presentation			
Week 5	Lecturing Chapter-3			
9/24	Lecturing Chapter-3			
9/26, 28	Lecturing Chapter-3			
Week 6	Lecturing Chapter-3			
10/1 10/3,5	Assign projects, quiz, do group projects + presentation Define your research topic			
Week 7				
10/8	Lecturing Chapter-4			
10/10,12				
Week 8	Lecturing Chapter-4			
10/15	Assign projects, quiz, do group projects + presentation			
10/17,19	Assign projects, quiz, do group projects + presentation			
Week 9				
10/22	Lecturing Chapter-5,			

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Date	Topic
10/24,26	
Week 10	Lecturing Chapter-5,
10/29	
10/31,	Assign projects, quiz, do group projects + presentation Define your research topic
11/2	Define your research topic
Week 11	Lecturing Chapter-6,
11/5	
11/7,9	
Week 12	Lecturing Chapter-6,
11/12	
11/14,16	Assign projects, quiz, do group projects + presentation
Week 13	Lecturing Chapter-7,
11/19	
11/21,23	Assign projects, quiz, do group projects + presentation
11/11/10	
Week 14	Lecturing Chapter-7,
11/26	Assign projects, quiz, do group projects + presentation
11/28,30	
Week 15	Lecturing Chapter-8,
12/3	Starting Research paper presentation
12/5,	Starting Research paper presentation
12/7	
Week 16	Research paper presentation
12/10	• • •
Finals Week	Research paper presentation by groups-Done
week	

GRADING POLICY:

Total Points	<u>100%</u>
Cases + group presentation	30%
Quizzes	10%
Research paper	45%
Discussion + individual questions + participation	15%

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Range		<u>Grade</u>	
90+ %		A	
80+ %		В	
70+ %		C	
60+ %		D	
<60 %		F	

Sample grading system:

Sample -

				30%				10%					45%	15%	100%
														Dis	
	PRJ-	P-	P-		p-		q-		q-	q-	q-			+	
Name	1	2	3	P-4	5	Ave	1	q-2	3	4	5	Ave	R-P	Pres	T-G
	30	30	25	30	25	28	10	8	10	8	10	9.2	40	15	93

QUIZZES AND EXAMS MATERIAL:

Questions in the quizzes are in MC/TF format and are based on textbook. After covering each chapter, you will be given a quiz comprised of about 20 questions.

Format of cases for submission:

- Cover page: Names of group members, Group Name, Case #,
- chapter #, Case title
- Introduction (Summary of case)
- State Problems
- Questions
- Answers to questions
- Conclusions
- At least 4 pages of the above mentioned format + content, including cover page. All the above format must be clearly stated in your paper, i.e., title + content of each section.
- -Not respecting the above format will cause losing points.
- -Cases must be submitted before deadline (deadline will be announced for each case after completing each chapter + group presentation date). **Zero grade for not presenting the case and submission after deadline**.

Research Paper:

Your task is to write a research paper about System analysis & Design method focusing on any of the following main topics (the topic must be very exact (narrow domain).

- -Comparison of Information systems development approaches
- -Different roles of players in IS development
- -Comparison of Systems analysis approaches
- -Project management (such as issues, comparison of different tools, A real case of IT project Management)
- -Requirement discovery and fact findings methods
- Comparison of Data modeling and analysis methods
- -System proposal and system design
- and so on.....(any other topic must be coordinated with the instructor)

Please, by the week 10th all the groups must define their research paper topic.

Format of the research Paper to receive full marks

You research paper may be focused on any of the above mentioned topic. Your paper must be about 15 pages long single space, font 12. Having the following sections:

- -Title of your research paper + your group name + names
- -Abstract
- -Introduction
- -Concept development
- -Conclusion
- -References (at least 10 cited journal references), APA style

Group must dress up (**wear Sunday best**) for research presentation day. Not following this matter, 5 points will be deducted.

- -Not respecting the above format will cause losing points.
- -Research paper must be submitted before deadline (deadline will be announced for each group. Every member must be present to present the research paper, else loose points. **Zero grade for not presenting the case and submission after deadline**.

Rubric for Research paper (grading):

Factors	Grade	Grade-for content	Obtain Grade
Cover page	1	2	3
Introduction	1	4	5
State problem	1	9	10
Questions + answers	1	9	10
Conclusions	1	9	10
Individual ability of		e.g., not reading	7
presentation		from your notes	
Total			45

Rubric for cases (grading):

Factors	Grade	Grade-for content	Obtain Grade
Cover page	1	1	2
Introduction	1	2	3
State problem	1	6	7
Questions + answers	1	6	7
Conclusions	1	5	6
Individual ability of		e.g., not reading	5
presentation		from your notes	
Total			30

Defining group members:

On the first day of class, I shall define the group members and let you know.

LATE PENALTIES:

- 1. Late written or software assignments will not be accepted. Zero grades
- 2. THERE WILL BE NO MAKEUP QUIZZES OR EXAMS. Zero grades.

ATTENDANCE:

- 1. Students will attend class regularly. If attendance is impossible, obtain class notes from a fellow student, and then study them for understanding.
- 2. To get an excuse from class students must inform <u>at least three working days</u> in advance, unless it is impossible to do so.
- 3.Only 10% absences are allowed which include both excused and unexcused.

The Department of Business Administration Mission:

Educate students through a learning-centered environment.

To achieve its mission, the Department of Business Administration has adopted the following broad-based, student learning goal:

<u>Graduates will be prepared for entry into careers in business and for contributions to their global and local communities.</u>

In addition, the Department of Business Administration has adopted the following program-level student learning outcomes (starred outcomes are a focus of this course):

- 1. Graduates will attain higher learning in the field of business.
- 2. **Graduates will demonstrate information literacy.
- 3. **Graduates will demonstrate ability to use practical business tools.
- 4. Graduates will demonstrate good communication skills and ability to work effectively as part of a team.
- 5. Graduates will demonstrate the ability to analyze complex business situations in a realistic business environment.

Academic Integrity Statement (required on all BSU syllabi):

BSU students are expected to practice the highest standards of ethics, honesty and integrity in all of their academic work. Any form of academic dishonesty (e.g., plagiarism, cheating and misrepresentation) may result in disciplinary action. Possible disciplinary actions may include failure for part of all of a course as well as suspension from the University.

Students with Special Needs Statement (required on all BSU syllabi):

Upon request this document can be made available in alternate formats. Please contact the instructor (**your name and phone number**) or Kathi Hagen at Disabilities Services at (218) 755-3883. Please contact the Disability Services Office ONLY if you have a need for accommodations in this class. All other contact should be with your instructor.

GOOD LUCK!