# BEMIDJI STATE UNIVERSITY

**COLLEGE OF BUSINESS, TECHNOLOGY AND COMMUNICATION**
**Course Syllabus**
*FALL 2011-*

| | |
|---|---|
| **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, 9:30am-10:am,12:00noon-13:00pm, 15:00-17:00pm |
| **PHONE NUMBER**: | 218-755-2751 (Office)-1800-475-2001-ext-2751 |
| **FAX**: | 218-755-4100 |
| **E-mail**: | mtehrani@bemidjistate.edu |
| **ADDRESS**: | 1500 Birchmount Drive, NE, Bemidji, MN 56601. |
| **CLASS LOCATION:** | DH19B |
| **CLASS SCHEDULE**: | MWF, 13:00-13:50 pm |
| **FIRST DAY OF CLASS**: | Monday August 22nd, 2011 |
| **LAST DAY OF CLASS**: | Monday Dec 5th 2011 |
| **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

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:

| | |
|---|---|
| **Chapter1** | Weeks 1, 2, |
| **Projects & quiz  #1** | Projects and quiz date will be announced after completing chapters 1-2. |
| **Chapter 2** | Weeks 3,4. |
| **Projects & quiz  #2** | Projects and quiz date will be announced after completing chapter 2. |
| **Chapter 3** | Weeks 5,6 |
| **Projects & quiz  #3** | Projects and quiz date will be announced after completing chapter 3. |
| **Chapter 4** | Weeks  7,8 |
| **Projects & quiz  #4** | Projects and quiz date will be announced after completing chapter 4. |
| **Chapter 5** | Week 9 |
| **Projects & quiz  #5** | Projects and quiz date will be announced after completing chapter 5. |
| **Chapter 6** | Week 10. |
| **Projects & quiz  #6** | Projects and quiz date will be announced after completing chapter 6. |
| **Chapter 7** | Weeks 11,12. |
| **Projects & quiz  #7 ,** | Projects and quiz date will be announced after completing chapter 7. |
| **Chapter 8** | Weeks 13,14 |
| **Projects & quiz  #8** | Projects and Quiz date will be announced after completing chapter 8. |
| **Chapter 9** | Weeks 15,16 |
| **Projects & quiz  #7** | Projects and Quiz date will be announced after completing chapter 9. |

**GRADING P0LICY:**

| **Total Points** | **100%** |
|---|---|
| Cases + group presentation | 30% |
| Quizzes | 10% |
| Research paper | 45% |
| Discussion + individual questions + participation | 15% |

| **Range** | **Grade** |
|---|---|
| 90+ % | A |
| 80+ % | B |
| 70+ % | C |
| 60+ % | D |
| <60 % | F |

**Sample grading system:**

**Sample -**

| | **30%** | | | | | | **10%** | | | | | | **45%** | **15%** | **100%** |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Name | PRJ-1 | P-2 | P-3 | P-4 | p-5 | Ave | q-1 | q-2 | q-3 | q-4 | q-5 | Ave | R- P | Dis + 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. The majority of questions in the final exams (F-E) are from the quizzes that you have taken.

**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
- Max 4 pages, including cover page

*-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.

-Information systems development
-Different roles of players in IS development
-Systems analysis approaches
-Project management
-Requirement discovery and fact findings
- Data modeling and analysis

-System proposal and system design
- and so on……( any other topic must be coordinated with instructor)

Please, by the **week 10<sup>th</sup>** 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.

**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.
2. THERE WILL BE NO MAKEUP QUIZZES OR FINAL EXAMINATION.

**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 **at least three working days in advance**, unless it is impossible to do so.
3.Only **15%** absences are allowed which include both excused and unexcused.

**ACADEMIC HONESTY:**

Cheating on the work for this class will not be tolerated and will result in a failing final grade. The college experience is founded on the concepts of honesty and integrity. Dishonesty, cheating, plagiarism, or knowingly furnishing false information to the college is regarded as particularly serious offenses. Cases of dishonesty will be handled by levying certain penalties. Cheating on the work for this class will not be tolerated and will result in a failing final grade. However, in flagrant cases, the penalty may be dismissal from the college after proper due process proceedings.

**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:

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

> 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.

**DISCRIMINATION**:

 Bemidji State University does not discriminate on the basis of sex, religion, creed, national origin, race, age, disability, or any other basis prohibited by law. If you believe you have been discriminated against unlawfully, please bring this matter to the attention of your instructor or the BSU's Human Resource Office.

**SPECIAL ACCOMMODATIONS:**

In coordination with the Disability Support Service, reasonable accommodations will be provided for qualified students with disabilities (LD, Orthopedic, Hearing, Visual, Speech, Psychological, ADD / ADHD, Health Related & Other). Please meet with the instructor during the first week of class to make arrangements. Accommodations and alternative format print materials (large print, audio, disk or Braille) are available through the Disability Support Service, located in Office for Students with Disabilities Sanford Hall (218-755-3883).

**GOOD LUCK!**