

BA186 SYSTEMS ANALYSIS AND DESIGN

BA 186 Syllabus

c/o Ma Gloria Talavera, Ph.D.

COURSE DETAILS

BA186 SYSTEMS ANALYSIS AND DESIGN

Principles and methods for analyzing, designing and developing different types of business and management systems.

Course Description

BA 186: Systems Analysis and Design teaches methods for analyzing, designing, and developing different types of business and management systems. This course offers basic knowledge and skills related to computer-based business information systems and systems development practices. The course gives business students an understanding of the impact of information systems in organizations as well as a better grasp of the limits and constraints under which system analysts, programmers, technicians, and other information technology professionals work within organizations.

Check your understanding: 1. What are examples of *types* of business and management systems? 2. Give examples of computer-based business information systems 3. Give examples of systems development practices 4. Ask a business owner or manager regarding how big an impact would the loss of their information system software would be to their company

Course Objectives

At the end of this course, students must be able to:

- Learn and understand the processes, methodologies and tools involved in systems development.
- Recognize which tool and which technique to use in a given phase of the systems development process.

- Be exposed to the actual work environment that will provide them the opportunity to apply the concepts and principles of systems analysis and design.
- Understand the impact of SA&D activities to support the business objectives of organizations

Course Methodology

This course shall employ a variety of methods such as but not limited to, lecture-presentation, discussions, teamwork, video presentations, Q&A. Individual assignments shall be given and case studies shall be assigned so as to ascertain the level of understanding of students. The use of a Learning Management System (LMS) shall be observed all throughout the course duration. Specifically, e-Learning shall be employed to acquaint the students of this mode of learning. Submission of outputs shall be carried out through the LMS. Class interaction is encouraged using the discussion/chat facilities of the course LMS.

Course Learning Management System (LMS) and Official Class Directory

We will use google classroom. Details will be given on the first day of class.

You will not receive any email notices if you will not register in both the LMS and class directory sites. The LMS will provide you access to course materials, assignments and other information relevant to our course.

COURSE OUTLINE

| Meeting | Topics |
|---------|---|
| | Month 1 |
| mtg 1 | Preliminaries and Creation of Project Teams |
| mtg 2 | Chapter 1: The Systems Develop- ment Environment |
| mtg 3 | Chapter 2: The Origins of Software |

| Meeting | Topics |
|---------|---|
| mtg 4 | Presentation of Project Topics by Team Lead- ers/Introduction of Team Members |
| mtg 5 | Chapter 3: Managing the Infor- mation Systems Project |
| mtg 6 | Chapter 4: Identify- ing and Selecting Systems Develop- ment Projects |
| mtg 7 | Chapter 5: Initiating and Planning Systems Develop- ment Projects |
| mtg 8-9 | Month 2 Chapter 6: Determin- ing System Require- ments Field- work/Team Work/Lab Work |
| mtg 10 | Midterm Exami- nation |

| Meeting | Topics |
|-----------|---|
| mtg 11-12 | Chapter 7: Structur- ing System Process Require- ments Field- work/Team Work/Lab Work |
| mtg 13-14 | Chapter 8: Structur- ing System Data Require- ments Field- work/Team Work/Lab Work |
| mtg 15-16 | Month 3 Chapter 9: Designing Databases Field- work/Team Work/Lab Work |
| mtg 17-18 | Chapter 10: Designing Forms and Reports Field- work/Team Work/Lab Work |

| Meeting | Topics |
|-----------|--|
| mtg 19-20 | Chapter 11: Designing Interfaces and Dialogues Field-work/Team Work/Lab Work |
| mtg 21 | Chapter 12: Designing Distributed and Internet Systems Month 4 |
| mtg 22 | Pre-Final Examination |
| mtg 23 | Team Presentation |
| mtg 24 | Team Presentation |
| mtg 25 | Team Presentation |
| mtg 26 | Team Presentation |
| mtg 27 | Submission of Final Deliverables and Peer Review Month 5 |
| mtg 28 | Final Examination* |
| mtg 29 | Course Wrap-up |

| Meeting | Topics |
|---------|-----------------------|
| mtg 30 | Grade Consultation |

Note: *Based on actual circumstances and assessing the progress of the class, the Instructor reserves the right to change/ collapse/interchange any of the topics as listed above.*

COURSE REQUIREMENTS

The class shall observe the following course deliverables:

1. Written Exams (Midterm and Pre-Final)
2. Final Exam (for those who will not meet the average score of 60%, midterm and pre-final exams)
3. Quizzes (shall be given at the discretion of the Instructor)
4. Team Presentations and Deliverables

At the end of the semester, each student shall be evaluated based on the following items:

| Requirement | Weight |
|---|-------------|
| Class Participation/Attendance/Individual Assignments | 10% |
| Midterm Exam and Pre-Final Exam | 30% |
| Group Tasks/Assignments | 10% |
| SA&D Deliverables | 40% |
| Team Presentation | 10% |
| Total | 100% |

GRADE EQUIVALENTS

The scores of the students shall be matched using this grading scale:

| SCORE FINAL | GRADE |
|---------------|-------|
| 92 – 100 | 1.0 |
| 88 - below 92 | 1.25 |
| 85 - below 88 | 1.5 |
| 82 - below 85 | 1.75 |
| 78 - below 82 | 2.0 |
| 74 - below 78 | 2.25 |
| 70 - below 74 | 2.5 |
| 65 - below 70 | 2.75 |

| SCORE FINAL | GRADE |
|---------------|-------|
| 60 - below 65 | 3.0 |
| below 60 | 5.0 |

COURSE POLICIES

Project Teams

The class will be grouped into teams. Each team will have at most five (5) members. These teams will work on the SA&D deliverables, group assignments and in completing all the other requirements of the course.

Attendance

The class shall observe the University rules on attendance. This applies to sessions where physical presence is required. Four (4) absences (excused/unexcused) are allowed all throughout the duration of the course. A student who exceeds this maximum allowable absences shall be dropped from the class roll. The Instructor shall check the attendance from time to time and this shall be done on a random basis.

Submission of Requirements

Students are expected to demonstrate utmost diligence in the submission of course requirements. For every day of delay (includes weekends and holidays), five (5) points shall be deducted from the overall score awarded to any work/task. Time management should be observed by students so as to ensure prompt and quality submission of the course requirements.

Code of Ethics

The highest level of ethical standards must be observed by each and every class member. Being admitted into the program is an accomplishment that should not be tarnished with any pigment of fraud, deceit and distrust. The course will be delivered under the clear cloud of mutual trust and respect.

Peer Evaluation

Each member of the team will accomplish an online evaluation form at the end of the course. This evaluation form will capture each member's assessment of the performance of his/her team members. A rating of 1 shall be given to team members whose performance is Very Poor, 3 for Average performance and 5 for those who have Excellent performance. For each missing point, two (2) points shall be deducted from the team score and the student shall receive the resulting score (Illustration: if team score is 90 and peer evaluation rating of student A

is 3, student A will receive a score of 86). Thus, it is important that the peer evaluation will be done with utmost care and consideration of what really was delivered and performed by each member of the team.

Group Tasks/Assignments

The course will require groups/teams to work on various tasks and assignments. These group tasks/assignments shall be assigned to the teams at a particular time and submission deadlines shall be specified by the Instructor for each of the tasks/assignments. Papers related to the this team work must be uploaded into the LMS. The evaluation of papers will follow these metrics:

| RUBRIC | % |
|--------------------------------|-----|
| Organization and Logic | 30% |
| Depth of Analysis | 40% |
| Presentation/Delivery of Ideas | 20% |
| Overall Impact of Paper | 10% |

Other Policies

1. Complaints regarding exam results shall be entertained only within a period of one week after the examination papers are returned. No complaints shall be entertained after this period. Students must use a pen or ballpen when taking any examination, otherwise, no complaints whatsoever regarding the examination shall be accepted.
2. The specific guidelines that shall govern the other course requirements (team presentations and deliverables) shall be announced in the class prior to the implementation of said course requirements. Each day of delay (including Saturdays and Sundays) shall be penalized by deducting 5 points from whatever score earned by a student/team for a specific requirement.
3. Students who will get an average score of 60% or higher shall be exempted from taking the Final Exam. A student who will miss one of the exams (i.e. midterm or pre-final) shall receive 80% of the score of the other exam taken by the student. If he/she will miss both exams, the student will take a Completion Exam and the Final Exam (Thursday, Oct 10). Those who will take the Completion and Final Exam must expect a set of more difficult questions.
4. Teams are expected to submit ALL deliverables. If one item is missing, all team members shall automatically receive a grade of INC. For completing said requirements, item #3 above shall be applied in the computation of scores.

COURSE REFERENCES

- Modern Systems Analysis and Design, 6th edition. Jeffrey A. Hoffer, Joey F. George, and Joseph S. Valacich, 2011.
- Systems Analysis and Design. Kenneth E. Kendall and Julie E. Kendall, 6th edition.