

Oklahoma State University

Spears School of Business Department of MSIS

MSIS 5653 – Advanced Systems Development (All Sections)

Spring 2015 Syllabus (Version 1.0)

Instructor Dr. Dursun Delen

Spears and Patterson Endowed Chairs in Business Analytics Research Director for the Center for Health Systems Innovation Professor of Management Science and Information Systems

Office: BUS 426 (Stillwater) & NH341 (Tulsa); Phone: (918) 594-8283 Email: dursun.delen@okstate.edu; Web: http://spears.okstate.edu/~delen Email is usually the best way to privately communicate with me. Routine queries about the class should be posted in D2L and/or sent to my TA with a cc to me. I will be checking my email at least once every weekday and will respond at my earliest, usually within 24 hours on weekdays.

Teaching Mr. / Ms. TBA
Assistant Email: TBA

Class Web Site http://oc.okstate.edu/ (OSU's Desire2Learn Site)

Class Hours Tuesday, 4:30 pm to 7:10 pm (Stillwater – COR 127)

Office Hours Tuesday, 2:30 pm to 4:20 pm (in Stillwater – BUS 426)

... and by appointment

Course Overview

The overall course objective is to provide students with the concepts and skills needed to better understand and manage today's business processes and design information system solutions. This course concentrates on both the business process modeling using IDEF methods and the tools, and the overall information systems development life cycle. This is a course available to students seeking degrees in variety of disciplines such as management information systems, business administration, industrial engineering and computer science. Students who have the knowledge of a programming language (such as Visual Basic, Java, C#, etc.) and a basic understanding of the general business functions increase their likelihood of enjoying and greatly benefiting from this course.



| Learning |
|-----------------|
| Outcomes |

| Objective | Learning Goal | |
|--|--|--|
| Understand and apply systems thinking concepts. | Critical and creative thinking | |
| Compare and choose intelligently from among methods, tools, and techniques of business and systems analysis. | Business knowledge and competencyCritical and creative thinking | |
| Represent organizational scenarios using techniques from activity process, and date modeling. | Business knowledge and competency | |
| 4. Understand the process of information systems development while working as a group member in a project. | Business knowledge and competency Technology Skills Communication Skills | |
| Be aware of new trends and developments in the field of IS/IT. | Technology SkillsCommunication Skills | |

Required Text

Modern Systems Analysis and Design 7th Edition, by

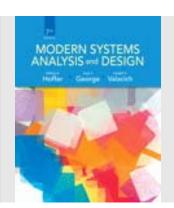
Jeffrey A. Hoffer Joey George Joe Valacich

ISBN-10: 0132991306 ISBN-13: 9780132991308

(ISBN might be different for the bundled

versions of the book)

©2014 • Prentice Hall • Cloth, 552 pp



Required Material

IDEFØ Method Report

(http://www.idef.com/Downloads/pdf/idef0.pdf)

IDEF3 Method Report

(http://www.idef.com/Downloads/pdf/Idef3_fn.pdf)

Business Process Reengineering (BPR) by R. Mayer and P. deWitte

(http://www.idef.com/Downloads/pdf/bpr.pdf)

Required Software

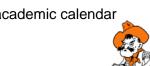
- 1. Al0 Win (by KBSI) available via cloud and for download at D2L
- 2. ProSim (by KBSI) available via cloud and for download at D2L
- 3. Microsoft Access, Visio, Word, Excel, ...

Syllabus Attachment

See Important dates and other information from OSU academic calendar

URL: http://academicaffairs.okstate.edu/faculty-a-staff





Homework Assignments

Several homework assignments will be given over the course of the semester. You will have one week to work on each (unless otherwise specified). You have to upload your <u>original</u> (do not copy someone else's work or from the Internet) well-organized write-up <u>electronically</u> in the appropriate Dropbox on D2L by the due date/time. The reports should be submitted as a single MS Word file (no other file formats are accepted). The homework assignments must be done <u>individually</u> (see *Academic Dishonesty* section for details). This means that you are not to solve problems together or compare answers prior to turning in the work. Cooperative efforts on individual work will result in an immediate score of zero for all parties involved. The purpose of the homework assignments is to provide you with practice and exposure to the relevant material, and to demonstrate working knowledge of the subject matter.

Quizzes

There will be mini-quizzes available on a weekly basis to help you and I assess your learning progress. These on-line quizzes will be available on D2L. Although you may take the quiz as an open-book/open-notes quiz, you should be aware that the quizzes are timed and you will not necessarily have time to look-up answers to all questions. Therefore, you should study for the quiz before you take it. If you miss the deadline, you will not be able to take the quiz later. There are no makeup quizzes but the lowest quiz score will be dropped from the evaluation at the end of the semester. After taking the quiz, you are on an honor system and you should not discuss the quiz items with other class members. Assistance in answering the quizzes from another person or discussing quiz items with other students in the class prior to the quiz deadline will not only prevent your learning but will also be considered cheating.

Here are some hints to help you with the mini-quizzes:

- Before you start a miniquiz, be sure to start and finish a sample quiz to ensure that your Internet connection and the D2L quiz feature works correctly on your browser/machine.
- For your convenience, each miniquiz may be taken up to two times, and many of the questions may be different the second time. If you decide to take it twice, the average of the two scores will be used as your final score. (Obviously, if you score a full 5 points in the first attempt, you do not have to take the miniquiz a second time!)
- 3. Be sure you save every answer before you go to the next question.
- 4. Do not exceed the miniquiz time limit. If you exceed the time limit by more than ten seconds, your score will be reduced to zero.

Examination

There will be one mid-term and one final exam. The exams will include a combination of multiple-choice, fill-in-the-blanks, short essay type questions and numerical problems. The test will be either in-class/paper-based or online via D2L; regardless of the type, the tests will be closed book, closed notes, and taken in a proctored environment.



Participation and Professionalism

10% of the grade will be coming from your class participation and the way in which you present yourself in class and on the online discussion boards. You are expected to (1) come to the class on time, and (2) read the assigned material prior to the start of the class, so that you can intellectually and meaningfully contribute with your participation. A part of your participation will come from your intellectual/productive activities on the D2L discussion boards. For distance students, the participation will come from the D2L discussion boards.

What makes up a quality online discussion?

- ✓ Input that creates awareness of issues
- ✓ Input that maintains the continuity and focus of the discussion at hand.
- ✓ Input that raises intelligent, critically-though out even controversial issues
- ✓ Input that challenges the status-quo with well-reasoned arguments
- ✓ Input that provides an example from your own observations or experience of the current topic
- ✓ Input that is original not a copy and paste from somewhere else

Term Project

There will be a team-based term-project involving the complete systems development life-cycle, where you will develop an information systems solution to meet with a real-world organization's need. Depending on the class size, each team will be made up of three or five people. You will be responsible for selecting the team members, finding the real-world application, organizing and planning your project, and choosing and using suitable tools and programming languages for developing the prototype solution. Each team will submit a final report documenting each and every step of their system development process, and will present their project in class as a team at the end of the semester. More information about the term project will be provided in class.

Grading Policy

Mid-Term Exam: 200

Final Exam 200

Homework Assignments: 150 Term Project: 250

Quizzes: 100

Participation & Professionalism: 100

TOTAL: 1000 points

The final grade will be determined using a standard scale based on the total points: $(>900 \rightarrow A, 800-899 \rightarrow B, 700-799 \rightarrow C, 600-699 \rightarrow D, <600 \rightarrow F)$. The decision whether to curve (if needed) will be made only at the end of the semester. For distance students the participation and professionalism points will be reduced to 50 points (participation via the D2L discussion board only) and the total points will be adjusted accordingly.



Special Accommodations for Students

According to the Americans with Disabilities Act, each student with a disability is responsible for notifying the University of his/her disability and requesting accommodations. If you think you have a qualified disability and need special accommodations, you should notify the instructor and request verification of eligibility for accommodations from the Office of Student Disability Services. Please advise the instructor of your disability as soon as possible, and contact Student Disability Services, to ensure timely implementation of appropriate accommodations. Faculty has an obligation to respond when they receive official notice of a disability but are under no obligation to provide retroactive accommodations. To receive services, you must submit appropriate documentation and complete an intake process during which the existence of a qualified disability is verified and reasonable accommodations are identified. Go to www.okstate.edu/ucs/stdis/ or call 405-744-7116.

Academic Dishonesty

You are expected to be aware of all kinds of academic dishonesty. Please check with the instructor if you have any doubts or questions. In particular, any work found to be similar to that on existing websites or similar to work done by current or former students in the past will be considered for plagiarism. This will be checked by means of suitable software. Participating in a behavior that violates academic integrity (e.g., unauthorized collaboration, plagiarism, multiple submissions, cheating on examinations,



fabricating information, helping another person cheat, unauthorized advance access to examinations, altering or destroying the work of others, fraudulently altering academic records, and similar behaviors) will result in a sanction. . Sanctions include: lowering of a letter grade, receiving a failing grade on an assignment, examination or course, receiving a notation of a violation of academic integrity (F!) on your transcript, and being suspended from the University. You have the right to appeal the charge. Contact the Office of Academic Affairs, 101 Whitehurst, 405-744-5627.

Missed Examinations

Only in extenuating circumstances such as family crisis, illness, death in the family, etc., will makeup provisions apply. Advice your instructor in advance, or right after the fact, of absence due to such matters, so that necessary arrangements can be done in a timely manner.

Late Assignments

Late assignments will not be accepted, unless prior permission is granted by the instructor.

Attendance

Attendance to the class is not required but **highly recommended**. Keen in mind that you cannot participate without attending the class. In any cas students will be held accountable for all work covered in the class despivalid reasons for their absence.



Tentative Course Outline

(Some Alterations are Likely)

| Date | Topic | Reading Assignment |
|--------|--|-----------------------|
| Jan 13 | Introduction to Systems Development Course | |
| Jan 20 | IDEF0 Modeling with AI0Win | IDEF0 Method Report |
| Jan 27 | IDEF3 Modeling with ProSim | IDEF3 Method Report |
| Feb 3 | Business Process Reengineering (BPR) | BPR Document |
| Feb 10 | Understanding Systems Development Projects | Ch 1 & 2 |
| Feb 17 | Managing the IS Projects | Ch 3 |
| Feb 24 | Planning - Making the Business Case | Ch 4 & 5 |
| Mar 3 | Mid-term Exam | |
| Mar 10 | Determining Systems Requirements | Ch 6 |
| Mar 17 | Spring Break - No Class | |
| Mar 24 | Structuring System Process Requirements | Ch 7 |
| Mar 31 | Structuring Data Requirements & Designing DBs | Ch 8 & 9 |
| Apr 7 | Designing Forms and Reports & Interfaces/Dialogs | Ch 10 & 11 |
| Apr 14 | System Implementation & Maintenance | Ch 13 & 14 |
| Apr 21 | System Maintenance & Project Presentations | Ch 14 |
| Apr 28 | Project Presentations | Final Reports are DUE |
| May 4 | Final Exam | |

The instructor reserves the right, when necessary, to modify the syllabus: alter the grading policy, change examination dates, and modify the course content. Modifications will be announced and discussed in class and will be posted on the class website. Students are responsible for those changes.

