University of Tulsa

Tulsa, Oklahoma

Fall 2015

Management Information Systems

Lori N. K. Leonard, Ph.D.

HELM 313-B, (918) 631-2787
lori-leonard@utulsa.edu
http://bus.collins.utulsa.edu/leonardln

Course Syllabus
MIS 4053*: *Systems Analysis and Design
(9:30-10:45 a.m. TTh – HELM 316)
Office Hours: 12:45-1:45 p.m. TTh; and by appointment

Course Objectives: The objective of this course is to provide MIS majors and minors an introduction to the concepts of Systems Analysis and Design. This course will provide a thorough understanding of the tools available to analysts and designers. Specific tools of interest are data flow diagrams (DFDs), entity relationship diagrams (ERDs), data dictionaries (DDs), structure charts, decision trees and tables, structured English, etc.

Learning Objectives:

- Use a project based team to plan for a real information system
- Utilize fundamentals of process modeling
- Reinforce fundamentals of data modeling
- Apply requirement elicitation skills
- Utilize prototyping skills

Text: Text -- Hoffer, J.A., George, J.F. and Valacich, J.S. (2014). *Modern Systems Analysis & Design*, 7th edition, Prentice Hall: Pearson Education, Inc., Upper Saddle River, NJ.
Software – Microsoft Project and Microsoft Visio (in the MIS lab)

PowerPoint Lecture Slides: All lecture slides can be obtained from the course website (http://bus.collins.utulsa.edu/leonardln/). It is the student's responsibility to print the slides and bring them to class for note taking.

Class Procedures: The teaching method for this course will include lecture/discussion, in-class examples/cases, and outside assignments. Video and computer demonstrations will be employed where appropriate.

Assignment Due Date Policy: All assignments will be assigned a date and time they are due. EVEN ONE MINUTE LATE IS STILL LATE. Late submission of assignments will be assigned a penalty of 25% on the day they are due, and 25% for each additional day. Late submissions of team evaluation forms (due with each milestone) will result in a 5% reduction in that individual's milestone score.

Attendance Policy: It is the student's responsibility to attend class. If a class is missed, it is the student's responsibility to obtain assignments, lecture notes, etc. Class attendance is necessary in order to complete the team project. Therefore, when a student misses ***three*** (unexcused) class periods (three tardies equal one absence), he/she will be removed from the team and will be required to complete the project on his/her own.

Examinations: There will be three exams given during the semester. The exams will consist of a mixture of multiple choice, problems, and essay questions. There are no make-up exams, except in those cases mandated by University of Tulsa policy. You are expected to notify me as soon as you become aware that you might have to miss an exam. An unexcused absence from an exam will result in a score of zero.

Projects: One group project will be assigned this semester. That project will consist of *four milestones* to be completed at different points during the semester (refer to tentative outline for due dates). The milestones are due at the beginning of class on the due date. The instructor will assign group members by the second week of the semester. These groups will be for the entire semester. Project guidelines will be provided as needed.

Professional Development Assignments:
Each student is required to attend two professional development activities during the semester. The point value for each is provided in the "grades" section. In order to receive full credit for the event, the student must arrive on time and not leave before the completion of the event. The student must also provide a short synopsis of the event which consists of three items: (1) the date, (2) the speaker, and (3) a 3-5 sentence summary of the event. The synopsis must be turned-in during the next class session following the event. Acceptable events for the Fall 2015 are as follows:

Professional Development Event	**Date**	**Time**	**Location**
Sept. iTU professional meeting – Koch Industries	Sept. 2, 2015	12:00-12:45pm	HELM 219
Oct. iTU professional meeting – Devon Energy	Oct. 7, 2015	12:00-12:45pm	HELM 219
Nov. iTU professional meeting – Phillips 66	Nov. 4, 2015	12:00-12:45pm	HELM 219
BAP/iTU Challenge	TBD	6:00-8:30pm	Andy B's
iTU Mentorship Events	TBD	TBD	TBD

Team Building Workshop	Nov. 6, 2015	TBD	TBD

Grades:

Exam 1	50
Exam 2	150
Exam 3	150
Professional Dev.	50
Project	200
Total Points	600

Grading Scale (based on approximately 600):

90% through 100%	A
80% through 89%	B
70% through 79%	C
60% through 69%	D
Below 60%	F

University Sponsored Activities: Students involved in any university sponsored activity that requires their absence from class must notify me of their absence prior to him/her being gone. Also, all assignments due on the day(s) the student will be absent must be turned in prior to he/she being gone.

Disabilities Act: Students with disabilities should contact the Center for Student Academic Support to self-identify their needs in order to facilitate their rights under the Americans with Disabilities Act and Amendments and set up appropriate accommodations. All students are encouraged to familiarize themselves with and take advantage of services provided by CSAS, including tutoring, academic counseling, and developing study skills. CSAS also provides confidential consultations to any student with academic concerns.

Student Academic Support: All students are encouraged to familiarize themselves with and take advantage of services provided by the Center for Student Academic Support, such as tutoring, academic counseling, and developing study skills. The Center provides confidential consultations to any student with academic concerns as well as to students with disabilities.

Computing Practices: All students are expected to follow University policies on computer use. Refer to the *Student Handbook* and familiarize yourself with the "Ethics Code and Policy for Computer Use".

Academic Dishonesty: All students are expected to follow University policies on honesty and ethical behavior. Please obtain the pamphlet *Collins College of Business Policies and Procedures Relating to Academic Misconduct* and familiarize yourself with its contents. It can be found at: http://www.utulsa.edu/academics/colleges/collins-college-of-business/Advising/Academic-Policies/Academic-Misconduct.aspx.

Disclaimer: Instructor may deviate from schedule.

Tentative Outline for MIS 4053 Fall 2015			
Week	**Date**	**Topic**	**Reading / Due Dates**
1	8/25	**Introduction/Syllabus :** (Objectives, Class requirements, Project milestones)	
	8/27	**Role of Systems Analyst:** (Stakeholders; System analysts – role, key characteristics, skills required; History of software development; Success/failure of IS projects)	Ch 2 Appendix 1 (handout)
2	9/1	**Systems:** (Refresher of MIS 3003: Data vs. Info, IS/IT, TPS, CIS, MIS, DSS, ES, OAS, EIS)	
	9/3	**Development Methodologies/SDLC:** (Methodologies; SDLC phases)	Ch 1
3	9/8	***Exam 1: Concepts***	
	9/10	**Project identification and selection:** (Identify potential projects; Classify and rank projects; Select projects)	Ch 4
4	9/15	**Project initiation and planning:** (Team; Scope; Alternatives; Feasibility analysis; Estimation; Duration – PERT and Gantt; Cost)	Ch 3 Ch 5
	9/17	**Project initiation and planning**	
5	9/22	**Analysis – Determine requirements:** (System requirements; Structure requirements; Select best alternative; Current system analysis methods)	Ch 6
	9/24	**Analysis – Determine requirements**	*M1 due: 9/24*
6	9/29	**Analysis – Determine requirements** *(potential Work Day)*	
	10/1	***Conducting Interviews and Work Day***	
7	10/6	***Conducting Interviews and Work Day***	
	10/8	**Analysis – Process modeling:** (DFDs)	Ch 7 (pp. 200-221)
8	10/13	**Analysis – Process modeling**	*M2 due: 10/13*
	10/15	***Exam 2: Milestones 1 and 2***	
9	10/20	**Analysis – Process modeling**	
	10/22	**Analysis – Data modeling:** (ERDs; DD)	Ch 8 (and 9 as needed)
10	10/27	**Analysis – Logic modeling:** (Structure Charts; Structured English; Decision Tables; Decision Trees); and **Analysis – Select Best Alternative**	Ch 7 (pp. 221-224)
	10/29	*(potential Work Day)*	
11	11/3	*(potential Work Day)*	
	11/5	*(potential Work Day)*	
12	11/10	**Logical Design – Forms (Input) and Reports (Output)** (Principles of good output design; Report types; Chart types; Input forms; Principles of good input design)	Ch 10 *M3 due: 11/10*

	11/12	**Logical Design – Interface and Dialogue:** (Navigation; Menus)	Ch 11
13	11/17	**Logical Design – Interface and Dialogue:** (Navigation; Menus) *(potential Work Day)*	
	11/19	*(potential Work Day)*	
14	11/24	***Thanksgiving Break***	
	11/26	***Thanksgiving Break***	
15	12/1	*(potential Work Day)*	
	12/3	**Review for Final Exam**	*M4 due: 12/3*
16	12/8	*Reading Day*	
17	12/17	***Final Exam: Milestones 3 and 4*** **Tuesday, December 15 – 9:00-11:25 am**	*Final Completed Project due: 12/15*

MIS 4053
PROJECT GUIDELINES

Purpose: The purpose of the team project is to apply the systems analysis and design concepts studied in class and to develop an appreciation for the role of the analyst in the systems development process. The project will: (1) be governed by a comprehensive development methodology; (2) allow for the use of CASE technology throughout the life cycle; and (3) provide a practical, first experience in systems analysis and design.

Subject: Each team will be assigned a project selected by the instructor.

Teams: Each team will have three or more members. The instructor will select the team members.

Team Participation: A significant portion of your project score will be based on your participation in the project. Your team participation will be graded as follows: at the end of each milestone, each team member will confidentially evaluate the other team members by assigning a score from 0 to 100. The scores assigned to each team member will be averaged. The average score for that member will be used to adjust the final project grade for that member. The grades will be adjusted according to the following scale. Team evaluation forms can be found on the class website.

Average Evaluation	Final Project Grade Adjustment
90-100	No adjustment
80-89	Adjusted downward by 10%
70-79	Adjusted downward by 20%
60-69	Adjusted downward by 30%
50-59	Adjusted downward by 40%
0-50	Adjustment will equal average evaluation*

* For example: if your average evaluation is 37%, then you will receive 37% of the final project grade.

Team Dynamics: During the course of the semester, group members (collectively) can "officially" give other group members (individuals) a notice that they are not "pulling their weight" in the project. This must also be reported to me outside of the team evaluations. Based on the first grievance, I will meet with the student to discuss what he/she must do in order to improve upon his/her performance. If grievances are reported to me, regarding the same student, following this first meeting (indicating that the individual who received the notice has not improved), the other group members can vote to have the member removed from their team. At that point, the removed member will complete the group project on an individual basis. Additionally, I hold the right to remove a member from a team without the team's consent.

Tools: A CASE tool will be used to support the development of the system. Other software tools, such as Word and PowerPoint can (and probably should) be used for memos, summaries, and reports.

Grading: The grade distribution for the project will be:

Milestone 1: Project initiation and planning	10%
Milestone 2: Determine system requirements	35%
Milestone 3: Process, logic, and data modeling	35%
Milestone 4: Logical design	20%
	100%

Milestones:

Milestone 1: Project initiation and planning	Due: 9/24
Milestone 2: Determine system requirements	Due: 10/13
Milestone 3: Process, logic, and data modeling	Due: 11/10
Milestone 4: Logical design	Due: 12/3
Completed Project	Due: 12/15

Notes:

1. Specific requirements for each milestone will be provided as the concepts are discussed in class.
2. The milestone due dates represent the latest date a milestone may be turned-in for full credit. Late milestones are penalized 25% per day. Early completion of milestones is acceptable and encouraged! Teams are also permitted to have the instructor review selected material from the team's milestone early to gather feedback; however, the instructor will not review the entire milestone.
3. All previous milestones must be corrected before a current milestone can be submitted! A 10% penalty will be assessed to the current milestone if the previous milestone is not corrected. When submitting a completed milestone(s), the team should also submit the previously graded milestone.

General Comments about the Project:

1. Submit all milestones in a 3-ring loose-leaf binder. The binder should contain the current milestone and all preceding milestones. All preceding milestones must be corrected before submitting the current milestone.
2. All documentation should stand on its own. Do not assume that you will be around to answer questions.
3. Each milestone should have a cover memo explaining the purpose of the document, to whom it is addressed, who it is from, date, etc.
4. Nothing can tarnish your professional image with end users or managers (or instructors) more than spelling errors and grammatical errors. Check your work carefully. Better still, have somebody else check it. Remember, professionalism and appearance is very important. They rarely cover mistakes; however, they do make mistakes seem more tolerable.
5. Ask an individual who is not as computer literate as yourself to review your work before giving it to the instructor. This individual will be able to provide you with feedback on how well you communicated without using technical computer jargon.
6. Use appropriate technical writing techniques: flush left paragraphs, headings, bullet points, use a memo to introduce a document (the memo should introduce the document and end with a call for action), etc.
7. Handwritten material will not be accepted. NEVER turn in handwritten material (such as memos).
8. There is no "right" or "wrong" when it comes to a systems development project, only varying degrees of performance (i.e. completeness, accuracy, etc.).