

COURSE SYLLABUS

COM385: Systems Design

Course Description

Students will apply the concepts of systems analysis and design in a comprehensive software project. Students will use the concepts and skill sets acquired in the previous classes to design and build an IT solution in a real world business scenario. The final project will require students to work cooperatively in designing and implementing all aspects of an IT system. The emphasis is on current system development methodologies.

General Course Information

Number of Units/Weeks	04/10
#Hours Lecture/#Hours Laboratory/#Hours Homework	40/00/80
Prerequisite(s)	None
Co-requisites (s)	None
Course Developer(s)	Leticia Rabor, M.S.
Date Approved / Last Review	February 2017 / February 2017

Learning Outcomes

- Describe the various software development methodologies including the strengths and weaknesses of each.
- Demonstrate effective oral communication when working in development teams.
- Produce clear system, user, and security documentation for a software system.
- Work effectively in teams in designing and implementing software systems.
- Design and implement a comprehensive information system using current techniques, skills and tools.

Instructional Methods Employed in this Course

- Lecture and reading assignments
- Hands-on exercises and labs
- Research
- Student presentations
- Practical application of theory and skills in authentic projects
- Build on prior knowledge and experience of students to enhance richness of class activities

Information Resources for this Course



Textbook

John Satzinger, Robert Jackson, and Stephen Ford. Systems Analysis and Design In A Changing World, 7th edition. Cengage Learning, Boston, MA, 2016.
ISBN-13: 978-1-305-11720-4.

Student Companion Site

Cengage Brain

<http://www.cengagebrain.com/>



Other Materials

Coleman College. The College Writer's Guide. San Diego: Coleman College, 2009.



Web Site Readings

Software Design Tutorials

<http://www.smartdraw.com/tutorials/software-uml/uml.htm>

May 23, 2012

Object Management Group

<http://www.omg.org>

May 23, 2012

Table/Topics & Assignments

Types of Assignments:

Lecture -

Considered Lecture Hours

Classroom Discussion -

Considered Lecture Hours

In Class Critique -

Considered Lecture Hours

Delivering Oral Presentations -

Considered Lecture Hours

In Class (IC) Exercise -

Considered Lecture Hours

Reading - +-

Considered Homework (HW), work done outside of class

WebClass lesson (non-online courses) -

Considered HW, work done outside of class

Lab Work -

Considered Lab Hours

Quiz, Midterm or Final -

Considered Lecture Hours

Week 1						
Type	Topic/Description	LEC Hours	LAB Hours	HW Hours	Point Value	Due
LEC 1A	Overview of Systems Analysis & Design; The Role of the Systems Analysis	4				
HW 1A	Read Chapter 1 (45 pages) & Read Online Chapter A (18 pages). Evaluated by HW 1B.			6.3		
HW 1B	Project 1			3	50	Due Week 2
Total Week 1		4	0	9.3	50	
Week 2						
Type	Topic/Description	LEC Hours	LAB Hours	HW Hours	Point Value	Due
LEC 2A	Investigating System Requirements	4				
HW 2A	Read Chapter 2 (31 pages). Evaluation by HW 2B			3.1		
HW 2B	Project 2			5	50	Due Week 3
Total Week 2		4	0	8.1	50	
Week 3						
Type	Topic/Description	LEC Hours	LAB Hours	HW Hours	Point Value	Due
LEC 3A	Identifying User Stories and Use Cases	4				
HW 3A	Read Chapter 3 (23 pages). Evaluation by HW 3B.			2.3		
HW 3B	Project 3			6	100	Due Week 4
Total Week 3		6	0	8.3	100	

Week 4						
Type	Topic/Description	LEC Hours	LAB Hours	HW Hours	Point Value	Due
LEC 4A	Domain Modeling; The Traditional Approach to Requirements	3				
HW 4A	Read Chapter 4 (36 pages), Read OL B (33 pages). Evaluation by HW 4B			6.9		
HW 4B	Project 4			5	100	Due Week 5
Total Week 4		6	4	11.9	100	
Week 5						
Type	Topic/Description	LEC Hours	LAB Hours	HW Hours	Point Value	Due
LEC 5A	Foundations to Systems Design	2				
HW 5A	Read Chapter 6 (26 pages). Evaluated by HW 5B			2.6		
EXAM 5A	Midterm Exam Chapters 1-4, 6, 811, 14; Online Chapters A-B	2			150	
HW 5B	Project 5			6	100	Due Week 6
Total Week 5		6	4	8.6	250	
Week 6						
Type	Topic/Description	LEC Hours	LAB Hours	HW Hours	Point Value	Due
LEC 6A	Designing the User Interface	4				
HW 6A	Read Chapter 8 (38 pages). Evaluated by HW 6B.			3.8		
HW 6B	Project 6			5	100	Due Week 7
Total Week 6		4	0	8.8	100	
Week 7						
Type	Topic/Description	LEC Hours	LAB Hours	HW Hours	Point Value	Due

LEC 7A	Designing the Database	4				
HW 7A	Read Chapter 9 (35 pages). Evaluated by HW 7B.			3.5		
HW 7B	Project 7			5	50	Due Week 8
Total Week 7		4	0	8.5	50	
Week 8						
Type	Topic/Description	LEC Hours	LAB Hours	HW Hours	Point Value	Due
LEC 8A	Approaches to System Development	4				
HW 8A	Read Chapter 10 (31 pages). Evaluated by HW 8B			3.1		
HW 8B	Project 8			5	50	Week 10
Total Week 8		4	0	8.1	50	
Week 9						
Type	Topic/Description	LEC Hours	LAB Hours	HW Hours	Point Value	Due
LEC 9A	Project Planning and Project Management	4				
HW 9A	Read Chapter 11 (57 pages). Evaluated by HW9B.			5.7		
HW 9B	Final Preparation Review Questions			3	50	
Total Week 9		4	0	8.7	50	
Week 10						
Type	Topic/Description	LEC Hours	LAB Hours	HW Hours	Point Value	Due
LEC 10A	Deploying the New System	2				
EXAM 10A	Final Exam	1			150	
HW 10A	Present and Explain System	1			100	
Total Week 10		4	0	0	250	

Course Hours Summary

Week	Topic	LEC	LAB	HW
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		LEC	LAB	HW Hours
1	Overview of Systems Analysis & Design, The Role of the Systems Analysis	4	0	9.3
2	Investigating System Requirements	4	0	8.1
3	Identifying User Stories and Use Cases	4	0	8.3
4	Domain Modeling, The Traditional Approach to Requirements	4	0	11.9
5	Foundations for Systems Design	4	0	8.6
6	Designing the User Interface	4	0	8.8
7	Designing the Database	4	0	8.5
8	Approaches to System Development	4	0	8.1
9	Project Planning and Project Management	4	0	8.7
10	Deploying the New System	4	0	0
Total		40	0	80.3

Table/Point Breakdown

Week	Assignment	Possible Points	Percent of Grade
1	Project 1	50	5%
2	Project 2	50	5%
3	Project 3	50	5%
4	Project 4	100	10%
5	Project 5	100	10%
5	Midterm Examination	150	15%
6	Project 6	100	10%
7	Project 7	100	10%
8	Project 8	50	5%
9	Final Preparation Review Questions	25	2.5%
10	Final Examination	150	15%
10	System Presentation	75	7.5%
Total		1000	100%

Your Grades for this Course

Your final grade for this course will be based on an assessment by the Instructor of your performance on a number of course activities, which may include objective tests, classroom exercises, laboratory demonstrations, project papers, or other types of activities. The chart below indicates in what activities you will engage, how many possible points can be earned for each activity, and the percentage of your final grade that will be accounted for by each activity.

Students in this course should be graded following Coleman University assessment practices and policies. A point system is used in the University to indicate student performance on various required activities or projects. For this course, it is recommended that points be distributed as follows:

Coleman University Grade Assignment Policy:

Percent	Letter Grade	Grade Points
94-100	A	4
90-93	A-	3.67
87-89	B+	3.33
84-86	B	3
80-83	B-	2.67
77-79	C+	2.33
74-76	C	2
70-73	C-	1.67
67-69	D+	1.33
64-66	D	1
60-63	D-	0.67
N/A	INC	0
N/A	W	0
60 or above	CR	0
59 or below	NC	0
N/A	I	0
N/A	W	0
N/A	AU	0
N/A	TR	0
N/A	WV	0

Legend	
CR = Credit	NC = No Credit
I = Incomplete	W = Course Withdrawal
AU = Audit	TR = Transfer Credit

Academic Accommodation / Adjustment Policy:

In accordance with Section 504 of the Rehabilitation Act of 1973 and the Americans with Disabilities Act (ADA), Coleman University offers accommodations to students with documented physical, psychological, and/or cognitive disabilities. Coleman University will adhere to all applicable federal, state, and local laws, regulations, and guidelines with respect to providing reasonable accommodations as required to offer equal educational opportunities to qualified disabled individuals.

To qualify for an academic accommodation under ADA, the student must provide adequate documentation of a disability. Students seeking academic accommodations should contact the campus ADA Coordinator at 858-966-3953 or via email at ada@coleman.edu. The ADA Coordinator will review the documentation provided and verify ADA coverage. Students covered under ADA must meet with the ADA Coordinator at the beginning of every term to determine the appropriate academic accommodations. Failing to meet with the ADA Coordinator at the beginning of every term may impact the availability of accommodations.

After the academic accommodations have been determined, the students' instructors will be notified by the ADA Coordinator. If any problems or concerns regarding the provision of accommodations occur, the student must inform the ADA Coordinator. If the student feels accommodation is not being made appropriately, the student may follow the published Student Grievance Procedures.