

## **COURSE SYLLABUS**

### **COM620: Advanced Systems Analysis and Design**

---

#### **Course Description**

This course is designed to give students a solid foundation in systems analysis and design. The course provides in-depth coverage of established and evolving methods in information system development, demonstrating that the key to successful information system implementation starts with proper analysis and design. The course provides a broad overview of information systems development approaches including traditional structured approaches and newer object oriented approaches. As future IT managers, students will gain a general understanding of the tasks performed by systems analysts and designers.

#### **General Course Information**

Number of Units/Weeks/Sessions	5/5/10
#Hours Lecture/#Hours Laboratory/#Hours HWs*	50/0/100
Prerequisite(s)	None
Co-requisites (s)	None
Course Developer(s)	Patrick Kelly MS
Date Approved / Last Review	2008 / Aug. 2014

\*Homework Projects

#### **MSISM Program Learning Outcomes**

- Develop Detailed Business Plans Including Budgets
- Propose an Information Technology Security Plan for a Global Business
- Construct a Human Resources Strategic Plan

#### **Learning Outcomes**

- Differentiate the approaches to system development
- Evaluate system requirements approaches and alternatives
- Analyze system design elements and approaches

#### **Instructional Methods Employed in this Course**

- Lecture and reading assignments
- Hands-on exercises and labs
- Research
- Student facilitated small group discussion
- Student presentations
- Practical application of theory and skills in authentic design 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, Stephen Burd, Systems Analysis and Design in a Changing World, 5th Edition. Course Technology Incorporated, 2009, ISBN 10: 1-4239-0228-9. ISBN-13: 978-1-4239-0228-7

#### ☐ **Other Materials**

None

#### ☐ **Web Site Readings**

Student Online Companion can be found at <http://oc.course.com/mis/sad5>

### **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

Session 1						
Type	Topic/Description	LEC Time	LAB Time	HW Time	Point Value	Due
LEC 1A	The World of the Information Systems Analyst	1	0	0	0	
LEC 1B	Approaches to System Development	2	0	0	0	
HW 1A	Satzinger Chapters 1-2	0	0	8	0	
HW 1B	Weekly Thesis Assignment 1	0	0	10	50	Session 3
HW 1C	System Analysis Project	0	0	15	200	Session 8
HW 1D	System Analysis Presentation	0	0	5	160	Session 9,10
HW 1E	Curricular Practical Training Activity	0	0	10	80	Session 4
ICEX 1A	In-class Participation	2	0	0	20	Session 1
Total Session 1		5	0	48	470	
Session 2						
Type	Topic/Description	LEC Time	LAB Time	HW Time	Point Value	Due
LEC 2A	Analysis as a Project Manager	2	0	0	0	
LEC 2B	Investigating System Requirements	1	0	0	0	
HW 2A	Satzinger Chapters 3-4	0	0	9	0	
ICEX 2A	In-class Participation	2	0	0	20	Session 2
Total Session 2		5	0	9	20	
Session 3						
Type	Topic/Description	LEC Time	LAB Time	HW Time	Point Value	Due
LEC 3A	Modeling System Requirements	2	0	0	0	
LEC 3B	Traditional Approach to Requirements	1	0	0	0	
HW 3A	Satzinger Chapters 5-6	0	0	8	0	
HW 3B	Weekly Thesis Assignment 2	0	0	10	50	Session 5
ICEX 3A	In-class Participation	2	0	0	20	Session 3
Total Session 3		5	0	18	70	
Session 4						
Type	Topic/Description	LEC Time	LAB Time	HW Time	Point Value	Due

LEC 4A	Object-Oriented Approach	2	0	0	0	
LEC 4B	Evaluating Alternatives for	1	0	0	0	
HW 4A	Satzinger Chapters 7-8	0	0	8	0	
ICEX4A	In-class Participation	2	0	0	20	Session 4
Total Session 4		5	0	8	20	

### Session 5

Type	Topic/Description	LEC Time	Lab Time	HW Time	Point Value	Due
LEC 5A	Elements of System Design	1	0	0	0	
LEC 5B	The Traditional Approach to Design	1	0	0	0	
HW 5A	Satzinger Chapters 9-10	0	0	8	0	
HW 5B	Weekly Thesis Assignment 3	0	0	10	50	Session 7
EXAM 5	Prepare for Mid-Term	1	0	0	0	
ICEX5A	In-class Participation	2	0	0	20	Session 5
Total Session 5		5	0	18	70	

### Session 6

Type	Topic/Description	LEC Time	LAB Time	HW Time	Point Value	Due
LEC 6A	Designing the User Interface	2	0	0	0	
HW 6A	Satzinger Chapter 14	0	0	5	0	
EXAM 6	Midterm	1	0	0	100	
ICEX6A	In-class Participation	2	0	0	20	Session 6
Total Session 6		5	0	5	120	

### Session 7

Type	Topic/Description	LEC Time	LAB Time	HW Time	Point Value	Due
LEC 7A	Designing System Interfaces, Controls, Security	2	0	0	0	
LEC 7B	Making the System Operational	1	0	0	0	
HW 7A	Satzinger Chapters 15-16	0	0	11	0	
HW 7B	Weekly Thesis Assignment 4	0	0	10	50	Session 9

HW 7C	Curricular Practical Training	0	0	10	80	Session 7
IC EX 7A	In-class Participation	2	0	0	20	Session 7
Total Session 7		5	0	21	70	
<b>Session 8</b>						
Type	Topic/Description	LEC Time	LAB Time	HW Time	Point Value	Due
LEC 8A	Current Trends in System Development	3	0	0	0	
HW 8A	Satzinger Chapter 17	0	0	5	0	
IC EX 8A	In-class Participation	2	0	0	20	Session 8
IC EX 8B	System Analysis Project	0	0	0	0	Session 8
Total Session 8		5	0	5	20	
<b>Session 9</b>						
Type	Topic/Description	LEC Time	LAB Time	HW Time	Point Value	Due
LEC 9A	System Analysis Presentations	4	0	0	0	
EXAM 9	Prepare for Final	1	0	0	0	
Total Session 9		5	0	0	0	
<b>Session 10</b>						
Type	Topic/Description	LEC Time	LAB Time	HW Time	Point Value	Due
LEC 10A	System Analysis Presentations	4	0	0	0	
EXAM 10	Final Exam	1	0	0	100	
Total Session 10		5	0	0	100	

### Course Hours Summary

Session	Topic	LEC Time	LAB Time	HW Time
1	The World of the Information Systems Analyst	5	0	48
2	Investigating System Requirements	5	0	9
3	Modeling System Requirements	5	0	18
4	Object-Oriented Approach to Requirements	5	0	8
5	Elements of System Design	5	0	18
6	Designing the User Interface	5	0	5
7	Designing System Interfaces, Controls, Security	5	0	21
8	Current Trends in System Development	5	0	5
9	System Analysis Presentations	5	0	0
10	System Analysis Presentations - Final	5	0	0
Total		50	0	132

**Table/Point Breakdown**

<b>Session</b>	<b>Assignment</b>	<b>Possible Points</b>	<b>Percent of Grade</b>
1,3,5,7	Weekly Thesis Assignments 1- 4	200	20%
1-8	In-class Participation 1- 8	160	16%
7	Curricular Practical Training	80	8%
1	System Analysis Project	200	20%
1	System Analysis Presentation	160	16%
6	Mid-Term Exam	100	10%
10	Final Exam	100	10%
Total		1000	100%

### **Weekly Thesis Assignments**

The primary purpose of the Weekly Thesis Assignments is to prepare each graduate student at Coleman University for the final Master's Thesis.

Each week, students will submit additional progress toward his or her chosen thesis topic. Progress toward the thesis will include a minimum of three (3) pages of new content toward the thesis and cite no fewer than three (3) scholarly sources.

Each weekly submission should include a highlighted section indicating the new content from the previous week. New content could either be completely new material, or revision to existing material based on feedback provided by your Thesis Mentor or Teaching Assistant.

At the end of Week 3, each student will provide an in-progress review submission to his or her Thesis Mentor via WebClass in the Thesis In Progress section. The Thesis Mentor will provide feedback regarding the framework and approach each student is taking and provide general guidance regarding completion. This in addition to the Weekly Thesis Assignment submission is graded by the course Teaching Assistant.

### **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:**

<b>Percent</b>	<b>Letter Grade</b>	<b>Grade Points</b>
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

<b>Legend</b>	
CR = Credit	NC = No Credit
I = Incomplete	W = Course Withdrawal
AU = Audit	TR = Transfer Credit
WV = Waiver	

### **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](mailto: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.