COURSE SYLLABUS
COM 660: DATABASE SYSTEMS

Course Description

This course is designed to give students a solid foundation in practical database design. The course provides in-depth coverage of database design, demonstrating that the key to successful database implementation is in proper design of databases to fit within a larger strategic view of the data environment. As future IT manager students will gain a general understanding of the tasks performed by database modelers, designers, developers and administrators.

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	June 2012 / Aug. 2014

*Homework Projects

MSISM Program Learning Outcomes

- Analyze Business Information Technology Needs Strategically

- Construct a Human Resources Strategic Plan

Learning Outcome

- Analyze database systems

- Integrate the normalization of database tables

- Assess business intelligence and data warehouse

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 design projects

● Build on prior knowledge and experience of students to enhance richness of class activities

Information Resources for this Course

☐ **Textbook**

Peter Rob, Carlos Coronel, Database Systems: Design, Implementation, and Management, 8th Edition. Course Technology Incorporated, 2009, ISBN 10: 1-4239-0201-7. ISBN-13: 978-1-4239-0201-0

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	Database Systems	3	0	0	0	
IC EX 1A	Individual Research Paper & Presentation	1	0	0	10	Session 8
HW 1A	Rob: Chapter 1	0	0	3	0	
HW 1B	Weekly Thesis Assignment 1	0	0	10	50	Session 3
HW 1C	Team Research Paper	0	0	18	100	Session 8
HW 1D	Team Presentation	0	0	5	60	
HW 1E	Curricular Practical Training Activity	0	0	10	40	Session 8
HW 1F	Discussion Thread 1	0	0	0	50	
IC EX 1B	In-class Participation	1	0	0	10	Session 1
Total Session 1		5	0	46	320	

Session 2

Type	Topic/Description	LEC Time	LAB Time	HW Time	Point Value	Due
LEC 2A	Data Models	3	0	0	0	
IC EX 2A	Individual Research Paper & Presentation	1	0	0	10	Session 8
HW 2A	Rob: Chapter 2	0	0	4	0	
IC EX 2B	In-class Participation	1	0	0	10	Session 2
Total Session 2		5	0	4	20	

Session 3

Type	Topic/Description	LEC Time	LAB Time	HW Time	Point Value	Due
Lecture 3A	Relational Database Model	3	0	0	0	
IC EX 3A	Individual Research Paper & Presentation	1	0	0	10	Session 8
HW 3A	Rob: Chapter 3	0	0	5	0	
HW 3B	Weekly Thesis Assignment 2	0	0	10	50	Session 5
HW 3C	Discussion Thread 2	0	0	0	50	
IC EX 3B	In-class Participation	1	0	0	10	Session 3
Total Session 3		5	0	15	120	

Session 4

Type	Topic/Description	LEC Time	LAB Time	HW Time	Point Value	Due
LEC 4A	Entity Relationship (ER) Model	1	0	0	0	
LEC 4B	Normalization of Database Tables	2	0	0	0	
IC EX 4A	Individual Research Paper & Presentation	1	0	0	10	Week 4
HW 4A	Rob: Chapters 4-5	0	0	9	0	
IC EX 4B	In-class Participation	1	0	0	10	Session 4
Total Session 4		5	0	9	20	

Session 5

Type	Topic/Description	LEC Time	LAB Time	HW Time	Point Value	Due
LEC 5A	Advanced Data Modeling	2	0	0	0	
IC EX 5A	Individual Research Paper & Presentation	1	0	0	10	Session 8
HW 5A	Rob: Chapter 6	0	0	4	0	
HW 5B	Weekly Thesis Assignment 3	0	0	10	50	Session 7
HW 5C	Discussion Thread 3	0	0	0	50	Session 7
EXAM 5A	Prepare for Mid-Term	1	0	0	0	
IC EX 5B	In-class Participation	1	0	0	10	Session 5
Total Session 5		5	0	14	120	

Session 6

Type	Topic/Description	LEC Time	LAB Time	HW Time	Point Value	Due
LEC 6A	Database Design	3	0	0	0	
IC EX 6A	Individual Research Paper & Presentation	1	0	0	10	Session 8
HW 6A	Rob: Chapter 9	0	0	4	0	
EXAM 6A	Midterm	1	0	0	100	
IC EX 6B	In-class Participation	1	0	0	10	Session 6
Total Session 6		5	0	4	120	

Session 7

Type	Topic/Description	LEC Time	LAB Time	HW Time	Point Value	Due
LEC 7A	Business Intelligence & Database	2	0	0	0	
IC EX 7A	Individual Research Paper & Presentation	2	0	0	20	Session 8
HW 7A	Rob: Chapter 13	0	0	6	0	
HW 7B	Weekly Thesis Assignment 4	0	0	10	50	Session 9
HW 7C	Discussion Thread 4	0	0	0	50	
IC EX 7B	In-class Participation	1	0	0	20	Session 7
Total Session 7		5	0	16	140	

Session 8

Type	Topic/Description	LEC Time	LAB Time	HW Time	Point Value	Due
LEC 8A	Database Connectivity & Web Technology	2	0	0	0	
IC EX 8A	Individual Research Paper & Presentation	2	0	0	20	Session 8
HW 8A	Rob: Chapter 14	0	0	4	0	
IC EX 8B	In-class Participation	1	0	0	20	Session 8
Total Session 8		5	0	4	40	

Session 9

Type	Topic/Description	LEC Time	LAB Time	HW Time	Point Value	Due
LEC 9A	Team Presentations	4	0	0	0	
EXAM 9A	Prepare for Final	1	0	0	0	
Total Session 9		5	0	0	0	

Session 10

Type	Topic/Description	LEC Time	LAB Time	HW Time	Point Value	Due
LEC 10A	Team Presentations	4	0	0	0	
EXAM 10A	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	Database Systems	5	0	46
2	Data Models	5	0	4
3	Relational Database Model	5	0	15
4	Entity Relationship (ER) Model & Normalization of Database Tables	5	0	9
5	Advanced Data Modeling	5	0	14
6	Database Design	5	0	4
7	Business Intelligence & Database Warehouses	5	0	16
8	Database Connectivity & Web Technology	5	0	4
9	Team Presentations	5	0	0
10	Team Presentations - Final	5	0	0
Total		50	0	112

Table/Point Breakdown

Session	Assignment	Possible Points	Percent of Grade
1,3,5,7,8	Weekly Thesis Assignments 1-5	200	20%
1,3,5,7	Discussion Thread 1-4	200	20%
1	Team Research Paper	100	10%
1	Team Presentation	60	6%
1-8	Individual Research Paper & Presentation	100	10%
6	Mid-Term Exam	100	10%
10	Final Exam	100	10%
8	Curricular Practical Training	40	4%
1-8	In-class Participation	100	10%
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
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. 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.