COURSE SYLLABUS

COM 310 Advanced .NET

Course Description

Upon successful completion of this course, the student will have a better understanding of object orientated programming in the .NET. This course will cover objects and classes, including polymorphism and inheritance. The concepts of input validation, classic and structure error handling will be covered. In order to add functionality to class projects, SQL Server will be utilized. This course will also cover additional topics including collections, generics, and multithreading. An advanced look into Windows forms will be taken, in order to better understand the code generated by the .NET environment, and reports will be incorporated into projects.

General Course Information

Number of Units/Weeks	10-Apr
#Hours Lecture/#Hours Laboratory/#Hours HW*	30/20/60
Prerequisite(s)	COM202, COM242
Co-requisites (s)	N/A
Course Developer(s)	C. Oson, B. S.
Date Approved / Last Review	January 2008 / May 2014

* Homework

Learning Outcomes

After successfully completing this course, the student will be able to:

Incorporate SQL operations into SQL Server Reporting services.
Effectively use generic data structures.
Construct multi-threaded applications.

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

Albahari, Joseph and Ben Albahari. C# 3.0 in a Nutshell: A Desktop Quick Reference. O'Reilly Media; Third Edition, 2007. ISBN-13: 978-0596527570

Larson, Brian. Microsoft SQL Server 2008 Reporting Services. McGraw-Hill Osborne Media; 3 edition, 2008. ISBN-13: 978-0071548083

Other Materials
N/A

Drawing tools
N/A

Web Site Readings
N/A

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	.NET Basics Review	3				
HW 1A	Read chapters 1 & 2 in C# 3.0 in a Nutshell (50 pages). Evaluated in midterm			5		
LAB 1A	Console application		2		50	Week 2
Total Week 1		3	2	5	50	
Week 2						
Type	**Topic/Description**	**LEC Hours**	**LAB Hours**	**HW Hours**	**Point Value**	**Due**
LEC 2A	Classes & Collections	3				
HW 2A	Read chapters 3, 4 (pp. 105-125, 20 pages) & 7 (40 pages) in C# 3.0 in a Nutshell. Evaluated in midterm			6		
LAB 2A	Calculator class / form creation		2		50	Week 3
Total Week 2		3	2	6	50	
Week 3						
Type	**Topic/Description**	**LEC Hours**	**LAB Hours**	**HW Hours**	**Point Value**	**Due**
LEC 3A	Input Validation, Error Handling & Exception Handling	3				
HW 3A	Read chapter 4 (55 pages) in C# 3.0 in a Nutshell, class handout. Evaluated in midterm			6		

LAB 3A	Exception handling		2		50	Week 4
Total Week 3		3	2	6	50	

Week 4

Type	Topic/Description	LEC Hours	LAB Hours	HW Hours	Point Value	Due
LEC 4A	Relational Databases & SQL / Introduction to SQL Server Reporting Services	3				
HW 4A	Read chapters 3 & 4 (105 pages) in Microsoft SQL Server. Reporting Services. Evaluated in midterm			10.5		
LAB 4A	Loading SQL Scripts		2		50	Week 5
Total Week 4		3	2	10.5	50	

Week 5

Type	Topic/Description	LEC Hours	LAB Hours	HW Hours	Point Value	Due
LEC 5A	SSRS Continued	2				
HW 5A	Read chapter 5 (50 pages) in Microsoft SQL Server Reporting Services. Evaluated in midterm			5		
LAB 5A	Creating your first SSRS project		2		100	Week 6
HW 5B	Review midterm (273 pages). Evaluated in midterm			14		
Exam 5A	Midterm	1			100	In class
Total Week 5		3	2	19	200	

Week 6

Type	Topic/Description	LEC Hours	LAB Hours	HW Hours	Point Value	Due
LEC 6A	Polishing an SSRS report / report development tips	3				
HW 6A	Read chapter 7 (65 pages) in Microsoft SQL Server Reporting Services. Evaluated in final			6.5		
LAB 6A	Detailing an SSRS report		2		100	Week 7
Total Week 6		3	2	6.5	100	

Week 7

Type	Topic/Description	LEC Hours	LAB Hours	HW Hours	Point Value	Due
LEC 7A	Delegates / introduction to multi-threading in .NET	3				
HW 7A	Chapter 4 (pp. 105-118, 13 pages), chapter 19 (639-650, 11 pages) in C# 3.0 in a Nutshell, class handout. Evaluated in final			3		
LAB 7A	Introduction to delegates		2		100	Week 8
Total Week 7		3	2	3	100	

Week 8

Type	Topic/Description	LEC Hours	LAB Hours	HW Hours	Point Value	Due
LEC 8A	Introduction to multi-threading in .NET continued	3				
HW 8A	Chapter 19 (pp. 650-663, 13 pages) in C# 3.0 in a Nutshell. Evaluated in final			1.3		
LAB 8A	Threading basics		2		100	Week 9
Total Week 8		3	2	1.3	100	

Week 9

Type	Topic/Description	LEC Hours	LAB Hours	HW Hours	Point Value	Due
LEC 9A	Multi-threading in .NET continued	3				
HW 9A	Chapter 19 (pp. 686-689, 3 pages) in C# 3.0 in a Nutshell. Evaluated in final			0.3		
LAB 9A	Background worker class		2		100	Week 10
Total Week 9		3	2	0.3	100	

Week 10

Type	Topic/Description	LEC Hours	LAB Hours	HW Hours	Point Value	Due
LEC 10A	Discussion	1				
HW 10A	Final review. Evaluated in final			5		
Exam 10A	Final	2			100	
Exam 10B	Practical final exam		2		100	In class
Total Week 10		3	2	5	200	

Course Hours Summary

Week	Topic	LEC Hours	LAB Hours	HW Hours
1	.NET Basics	3	2	5
2	Classes & Collections	3	2	6
3	Error & Exception Handling	3	2	6
4	Relational Databases	3	2	10.5
5	SSRS	3	2	19
6	SSRS Reporting	3	2	6.5
7	Delegates & Multi-threading	3	2	3
8	Multi-threading Continued	3	2	1.3
9	Multi-threading Continued	3	2	0.3
10	Final Review	3	2	5
Total		30	20	62.6

Table/Point Breakdown

Assignment Type	Possible Points	Percentage of Grade
Lab projects	700	70%
Midterm	100	10%
Final	200	20%
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	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.