

# COM270 C# Programming I

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## SYLLABUS

### Description

This course introduces students to C# and the use of Graphical User Interface (GUI) forms to develop event-driven solutions to business problems. Students also acquire skills using ADO .NET tools to access databases. Sequential I/O access of text files is also covered. Projects are designed to simulate real-world application solution scenarios.

### General Course Information

Number of Units/Weeks	8/10
#Hours Lecture/#Hours Laboratory/#Hours Homework	64/40/120
Prerequisite(s)	COM230
Co-requisites (s)	N/A
Course Developer(s)	K. Van Matre, M.S.
Date Approved / Last Review	July 2007 / August 2014

### Resources

#### Text

Farrell, J. (2008) Microsoft Visual C# 2005: An Introduction to Object-Oriented Programming. Cengage Learning.

#### Supplemental Resources

Huddleston, James. Beginning C# 2005 Databases. Apress, 2006.

Deitel & Deitel. Visual C# 2005: How to Program. Prentice Hall, 2006.

## Course Objectives and Outcomes

Upon successful completion of this course, students will be able to:

### **Produce**

- Event-driven, user-interactive solutions to business problems
- Appropriate documentation
- Reusable templates and modules that can be utilized to solve a variety of business problems

### **Use**

- Logical skills in the solution of computer application development problems
- Text files and databases to assist in solving business problems
- Object-oriented design fundamentals (classes, objects, attributes, and methods)
- Oral and written instructions to determine requirements, procedures, expected outcomes, and product
- SDLC concepts to initiate requests for development or modification
- Effective team techniques to work with a diverse group of individuals toward a common goal

### **Knowledgeably Discuss**

- The fundamentals of event-driven programming
- The use of the three basic control structures (sequence, selection, and iteration) and how they apply to event-driven programming
- The fundamentals of database access and manipulation using ADO .NET
- Passing parameters
- Modularized, structured software solutions
- The use of classes for code reusability

## Course Outline (see course schedule for specific dates)

Week				
Days	Nights	Topic	Chapter or Resource	Activity
1	1	Introduction (Lesson 1) The IDE (Lesson 2) C# Applications (Lesson 3)	Chapter 1 Chapter 10 Chapter 2 SM Lessons 1 -3	<b>Read:</b> Chapters 1, 2, 10 and SM 106 pages: 13.3 hours <b>Review Questions:</b> Chapter 1,2 and 10 60 Questions: 4 hours <b>Evaluation :</b> graded, 2 point <b>Exercises:</b> #4 page 37, #9 page 77, and #7 page 411: 6 hours <b>Evaluation :</b> graded, 2 point <b>Project 1 – Arkham Books Kiosk</b> 6 hours <b>Evaluation :</b> graded, 10 points
2	2	Introduction to Classes and Objects (Lesson 4) Control Statements 1 (Lesson 5)	Chapter 7  Chapter 3 SM Lessons 4 & 5	<b>Read:</b> Chapters 3and 7 and SM 63 pages: 7.9 hours <b>Review Questions:</b> Chapter 3 and 7 40 Questions: 2.7 hours <b>Evaluation :</b> graded, 1.5 point <b>Exercises:</b> #5 page 111and #8 page 265: 4 hour <b>Evaluation :</b> graded, 1.5 point
3	3	Control Statements 2 (Lesson 6) Methods (Lesson 7) Arrays (Lesson 8)	Chapter 4  Chapter 6 Chapter 5 SM Lessons 6 – 8	<b>Read:</b> Chapters 4, 5, 6 and SM 76 pages: 9.5 hours <b>Review Questions:</b> Chapter 4,5 and 6 60 Questions: 4 hours <b>Evaluation :</b> graded, 2 point <b>Exercises:</b> #4 page 136, #2 page 168, and #8 page 211: 6 hours <b>Evaluation :</b> graded, 2 point <b>Project 2 – Arkham Books Kiosk Part 2</b> 3 hours <b>Evaluation :</b> graded, 10 points
4	4	Interface Controls 1 & 2 (Lessons 9 & 10) Classes and the Split Method (Lesson 11) Files and Streams (Lesson 12)	Chapter 11  Chapter 13  SM Lessons 9 - 12	<b>Read:</b> Chapters 11 and 13 and SM 93 pages: 11.6 hours <b>Review Questions:</b> Chapter 11 and 13 40 Questions: 2.7 hours <b>Evaluation :</b> graded, 1.5 point <b>Exercises:</b> #8 page 471and #5 page 585: 4 hour <b>Evaluation :</b> graded, 1.5 point <b>Project 3 – Arkham Books Kiosk Part 3</b> 6 hours <b>Evaluation :</b> graded, 10 points
5	5	Quiz 1 & 2 (Lesson 13) Class Libraries (Lesson 14) Exception Handling (Lesson 15)	Chapter 9  SM Lessons 13 -15	<b>Read:</b> Chapter 9 and SM 41 pages: 5.1 hours <b>Review Questions:</b> Chapter 9 20 Questions: 1.3 hours <b>Evaluation :</b> graded, 1 point <b>Exercise:</b> #4 page 363: 2 hours <b>Evaluation :</b> graded, 1 point <b>Project 4 – Arkham Books</b>

				Kiosk Part 4 6 hours <b>Evaluation</b> : graded, 10 points <b>Midterm exam</b> <b>Evaluation</b> : graded, 15 points
6	6	Strings (Lesson 16) Introduction to ADO .NET (Lesson 17) Inheritance The Connection Object (Lesson 18)	Chapter 8 SM Lessons 16 -18 Lecture Handouts	<b>Read</b> : Chapter 8 and SM 64 pages: 8 hours <b>Review Questions</b> : Chapter8 20 Questions: 1.3 hours <b>Evaluation</b> : graded, 1 point <b>Exercise</b> : #1 page 317: 2 hours <b>Evaluation</b> : graded, 1 point
7	7	Handling Events The Command Object (Lesson 19) Data Readers (Lesson 20) DataSets and DataAdapters (Lesson 21)	Chapter 12 SM Lessons 19 - 21 Lecture Handouts	<b>Read</b> : Chapter 12 and SM 75 pages: 9.4 hours <b>Review Questions</b> : Chapter 12 20 Questions: 1.3 hours <b>Evaluation</b> : graded, 1 point <b>Exercise</b> : #7 page 512: 2 hours <b>Evaluation</b> : graded, 1 point <b>Project 5</b> – Arkham Books Kiosk Part 5 12 hours <b>Evaluation</b> : graded, 10 points
8	8	DataBinding (Lesson 22) Stored Procedures (Lesson 23)	SM Lessons 22 & 23 Lecture Handouts	<b>Read</b> : SM and Handouts 23 pages: 2.9 hours <b>Evaluation</b> : Project 5 and Final
9	9	Handling Database Exceptions (Lesson 24) Quiz 3 (Lesson 25)	SM Lesson 24 Lecture Handouts  Lessons 14 – 24	<b>Read</b> : SM and Handouts 20 pages: 2.5 hours <b>Evaluation</b> : Project 5 and Final
10	10	Quiz 4 and Test 2 (Lesson 25)	Lessons 14 – 24	<b>Final exam</b> <b>Evaluation</b> : graded, 15 points

Total hours of required reading:

70.2 hours

Total hours chapter/discussion questions:

17.3 hours

Total hours chapter exercises:

26 hours

Total hours Program sets

33 hours – 20 hours lab = 13 hours

Total hours of out-of-class activities:

126.5 hours

## 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](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.