

# Note:

Course content may be changed, term to term, without notice. The information below is provided as a guide for course selection and is not binding in any form, and should <u>not</u> be used to purchase course materials.



# COURSE SYLLABUS

## **CSIS 209**

**C# Programming** 

#### **COURSE DESCRIPTION**

Development of computer and programming skills using the C# language. Students will learn how to use C# to develop stand-alone applications in an IDE. Advanced concepts, such as database connectivity and web applications will also be examined. (Formerly BMIS 209)

#### **RATIONALE**

This is the first of three programming courses in the Application Development cognate of the CSIS program. It provides the foundational knowledge for subsequent Java classes by introducing object-oriented programming.

## I. PREREQUISITE

For information regarding prerequisites for this course, please refer to the <u>Academic</u> Course Catalog.

#### II. REQUIRED RESOURCE PURCHASE

Click on the following link to view the required resource(s) for the term in which you are registered: <a href="http://bookstore.mbsdirect.net/liberty.htm">http://bookstore.mbsdirect.net/liberty.htm</a>

#### III. ADDITIONAL MATERIALS FOR LEARNING

- A. Computer with basic audio/video output equipment
- B. Internet access (broadband recommended)
- C. Microsoft Office
- D. Microsoft Visual Studio Express 2012 (accompanies text)

#### IV. MEASURABLE LEARNING OUTCOMES

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

- A. Develop C# applications, including information gathering, synthesis of system requirements, development of algorithms, and coding of information systems using a graphical development environment (Visual Studio and the console) using sequence, selection, and iteration control structures.
- B. Write object-oriented code in the creation and manipulation of classes using inheritance and polymorphism.
- C. Create methods in designing modular programs (including concepts of scope, static methods, method call stacks, recursion, method and operator overloading, pass-by value and reference, and optional parameters).
- D. Manipulate arrays, use a random number generator, write code to handle exceptions using try/catch/finally blocks, generate user defined exception classes, and recognize exceptions in the .NET exception hierarchy.
- E. Discuss the relevance of course material and the use of technology to a biblical worldview.

#### V. COURSE REQUIREMENTS AND ASSIGNMENTS

- A. Textbook readings and presentations
- B. Course Requirements Checklist

After reading the Course Syllabus and <u>Student Expectations</u>, the student will complete the related checklist found in Module/Week 1.

C. Discussion Board Forums (2)

Discussion boards are collaborative learning experiences. Therefore, the student will complete 2 Discussion Board Forums for this course. The student will discuss the assigned reading material on Ethical Standards with fellow classmates in the Discussion Board. In order to receive full credit for each forum, the student must answer the question(s) for the assigned module/week and reply to at least 2 classmates' threads.

D. Programming Assignments (8)

Each module/week's assignment is designed to reinforce and measure understanding of the materials covered in the assigned readings. Programming assignments will be submitted via zipped solution files in Blackboard.

E. Quizzes (8)

Each module/week will include a 10-question quiz that covers the assigned reading material for that module/week. Quizzes will include a combination of multiple-choice and/or true/false questions that are open-book/open-notes; however, only 1 attempt is allowed per quiz. Each quiz has a 30-minute time limit and must be completed in one sitting.

## VI. COURSE GRADING AND POLICIES

## A. Points

Course Requirements Checklist	10
Discussion Board Forums (2 at 20 pts ea)	40
Programming Assignments (8 at 100 pts ea)	800
Quizzes (8 at 20 pts ea)	160
Total	1010

#### B. Scale

$$A = 900-1010$$
  $B = 800-899$   $C = 700-799$   $D = 600-699$   $F = 0-599$ 

## C. Disability Assistance

Students with a documented disability may contact Liberty University Online's Office of Disability Academic Support (ODAS) at <a href="mailto:LUOODAS@liberty.edu">LUOODAS@liberty.edu</a> to make arrangements for academic accommodations. Further information can be found at <a href="https://www.liberty.edu/disabilitysupport">www.liberty.edu/disabilitysupport</a>.

#### VII. BIBLIOGRAPHY

Oz, Effy. (1992). Ethical standards for information systems: A case for a unified code. *MIS Quarterly*, 16(4).



# COURSE SCHEDULE

# **CSIS 209**

Textbook: Deitel & Deitel, Visual C# 2015 How to Program (2017).

Module/ Week	READING & STUDY	Assignments	Points
1	Deitel & Deitel: chs. 1–3 3 presentations	Course Requirement Checklist Programming Assignment 1 Quiz 1	10 100 20
2	Deitel & Deitel: chs. 4–6 3 presentations	Programming Assignment 2 Quiz 2	100 20
3	Deitel & Deitel: chs. 7–8 2 presentations 1 article	DB Forum 1 Programming Assignment 3 Quiz 3	20 100 20
4	Deitel & Deitel: chs. 9–10	Programming Assignment 4 Quiz 4	100 20
5	Deitel & Deitel: ch. 11 2 presentations	Programming Assignment 5 Quiz 5	100 20
6	Deitel & Deitel: ch. 12	Programming Assignment 6 Quiz 6	100 20
7	Deitel & Deitel: ch. 13 1 article	DB Forum 2 Programming Assignment 7 Quiz 7	20 100 20
8	Deitel & Deitel: chs. 14–15	Programming Assignment 8 Quiz 8	100 20
Total			1010

DB = Discussion Board

**NOTE**: Each course week (except Module/Week 1) begins on Tuesday morning at 12:00 a.m. (ET) and ends on Monday night at 11:59 p.m. (ET). The final week ends at 11:59 p.m. (ET) on Friday.