

CSC 211 - EVENT-DRIVEN PROGRAMMING

CREDIT HOURS: 3

PREREQUISITES: CSC 102

GRADE REMINDER: Must have a grade of C or better in each prerequisite course.

CATALOG DESCRIPTION

Emphasis on problem analysis, solution design, and programming methods. Implementation of commercial applications.

PURPOSE OF COURSE

To acquaint the student with computer problem solving using a visual development environment through the assignment of a variety of problems requiring solution development, program implementation, and documentation.

EDUCATIONAL OBJECTIVES

Upon successful completion of the course, students should be able to:

1. Create well-designed programs.
2. Demonstrate familiarity with elementary information systems concepts.
3. Demonstrate familiarity with visual and event-driven programming concepts and techniques.
4. Demonstrate familiarity with the basic concepts of object-oriented programming.
5. Demonstrate familiarity with the tools and techniques for constructing attractive and useful user interfaces.
6. Develop complete programs that solve intermediate problems dealing with various data types, elementary data structures, and objects.

COURSE CALENDAR

This course meets for a minimum of 37.5 lecture contact hours during the semester, including the final exam. Students have significant weekly extracurricular assignments which may involve reading, watching videos, or engaging in other forms of preparation. Students are expected to complete 10-15 laboratory or programming assignments, and 2-3 periodic exams in addition to the final exam. Students are expected to prepare for any class assignments or quizzes over the material covered in class or the extracurricular assignments. Successful completion of these activities requires at a minimum six additional hours of outside of classroom work each week.

CONTENT

Hours

Integrated Development Environment (IDE).....	5
Controls	
Debugging	
Using help	
Data Types and Elementary Data Structures	5
Objects	10
Classes	

Properties
Methods
Encapsulation
Inheritance/reuse
Polymorphism

Program Structure	10
Control structures -- sequence, iteration, selection	
Program modularity	
Interprogram communication: subprograms, functions, parameters, scope	
Files	3
Problem Solving and Algorithm Design	9
Analysis	
Specification	
Design	
Implementation	
Testing	
Maintenance	
Exams (plus final)	3
	TOTAL 45

REFERENCES

Gaddis & Irvine, Starting Out With Visual Basic 2012, 6th Ed., Pearson, 2014

Hoisington, Microsoft⁷ Visual Basic 2012 Comprehensive, Course Technology, 2014.