CIS 216   Advanced C# Programming

I. CIS 216 Advanced C# Programming – 3 Semester Hours

II. Course Description
This course is a continuation of C# programming. Techniques for the improvement of application and systems programming will be covered and other topics may include developing GUI's with C#, memory management, Classes and objects, functions, debugging, portability, and reusable code. Upon completion, the student will been able to demonstrate knowledge of the topics through the completion of programming projects and appropriate tests.

III. Prerequisite
CIS 215 or equivalent background

IV. Textbook
Textbook: TBA
Publisher:
Author:

V. Course Objectives
  A. The student will be able to code programs using Objects and Methods in C#.
  B. The student will understand Event-Driven concepts used by C#.
  C. The student will understand object oriented concepts used by C#.
  D. The student will understand Database applications using C#.
  E. The student will understand Web applications using C#.

VI. Course Outline of Topics
  A. The student will be able to code programs using Objects and Methods in C#..
    1. The student will be able to use the C# Objects and Methods to write, debug, and execute programs using:
      a. Screen Forms
      b. Forms Controls
      c. Object Properties
  B. The student will understand Event-Driven concepts used by C#.
    1. The student will develop Event-Driven programs using:
      a. User Events
      b. System Events
      c. Object Methods
      d. Event Procedures
      e. Interactive Debugging
  C. The student will understand object oriented concepts used by C#.
    1. The student will be able to write, debug and execute code for the following:
      a.   Classes
      b. Collections
      c. Two and Three Tier Applications
  D. The student will understand Database applications using C#.
    1. The student will be able to develop C# programs using:
      a. SQL Server databases
      b. Datasets, tables, rows and queries.
  E. The student will understand Web applications using C#.
    1. The student will be able to develop C# applications using:
      a. ASPX web pages
      b. Web Services
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VII. **Evaluation and Assessment**

Evaluation and assessment will be determined by the instructor and specified on the instructor's class syllabus. Grades will be based upon following scale: A = 90 – 100%, B = 80 – 89%, C = 70 – 79%, D = 60 – 69%, and F = below 60%.

VIII. **Attendance**

Students are expected to attend all classes for which they are registered. Students who are unable to attend class regularly, regardless of the reason or circumstance, should withdraw from that class before poor attendance interferes with the student's ability to achieve the objectives required in the course. Withdrawal from class can affect eligibility for federal financial aid.

IX. **Statement on Discrimination/Harassment**

The College and the Alabama State Board of Education are committed to providing both employment and educational environments free of harassment or discrimination related to an individual's race, color, gender, religion, national origin, age, or disability. Such harassment is a violation of State Board of Education policy. Any practice or behavior that constitutes harassment or discrimination will not be tolerated.

X. **Americans with Disabilities**

The Rehabilitation Act of 1973 (Section 504) and the Americans with Disabilities Act of 1990 state that qualified students with disabilities who meet the essential functions and academic requirements are entitled to reasonable accommodations. It is the student's responsibility to provide appropriate disability documentation to the College. The ADA Accommodations Office is in FSC 305 (205-856-7731).