SET 253 C Programming 3

Course Description: A continuation of SET 252. Topics include: C#, advanced database programming techniques using stored procedures and views with SQL Server, and ASP.NET with C#.

Prerequisites(s): IT 111, SET 252 **Corequisite(s):** No corequisite

Lecture Hours: 2	Lab Hours: 3	Credit Hours: 3
Lab Fee: 105	Supplemental Fee: 0	Purpose:
☐ Transfer Assurance Guide Course (TAG)	☐ Transfer Module Course (TM)	
Course Format: Lec/Lab	Grading: A/B/C/D/F/I	
Delivery Method: □ Web	□ Hybrid	X Classroom
Semesters Offered: □ Fall	X Spring	X Summer

Course Primary Text:

Title: Professional ASP.NET 4.5 in C# and VB	Edition: 1st
Author(s): Gaylord and others	
Publisher: Wrox Press	

Supplemental Materials:

None

Course Outcomes:

1	Understand 2-tier and 3-tier database programming concepts and methods.
2	Understand the flow of data in 2-tier and 3-tier applications.
3	Know what ADO.Net is and how to use it.
4	Know how to programmatically login and logout and how to programmatically read, add, edit and delete records in a database in 2-tier and 3-tier environments with C# and ASP.Net with either MS Access or MS SQL Server as a backend.
5	Know and understand the syntax for the C# programming language.
6	Be able to apply knowledge to solve complex business database programming problems.

Course Topics:

Week 1	Introduction to the C# programming language and Visual Studio GUI. Review of coding standards and programming fundamentals.
Week 2	Connect and disconnect from a database programmatically in 2-tier application. Load a list from a database programmatically in 2-tier application.

Week 3	Add, edit and delete records in 2-tier application.
Week 4	Load, add, edit and delete again but with child table dependencies, more complicated data types and validation with regular expressions.
Week 5	Advanced database programming project #1 – Import/Export with repeating groups and redundant data
Week 6	Project #1 continued.
Week 7	Project #1 continued.
Week 8	Project #1 continued.
Week 9	Project #1 continued.
Week 10	Advanced database programming project #2 – Web-based application with child-table dependencies, race conditions and more.
Week 11	Project #2 continued.
Week 12	Project #2 continued.
Week 13	Project #2 continued.
Week 14	Project #2 continued.
Week 15	Project #2 continued.

Methods of Evaluation/Assessment

Homework	30%
Project #1	35%
Project #2	35%

Course Keeper: Robert Nields Date Completed: 4/1/2019