Course Prefix and Number: ITP 236   **Credits:** 4

Course Title: C# Programming II

Course Description:
Focuses instruction in advanced object-oriented techniques using C# for application development. Emphasizes database connectivity and networking using the .NET Framework and database processing using the Entity Framework. Prerequisite: ITP 136 or equivalent. Lecture 4 hours per week.

General Course Purpose:
ITP 236 is a requirement for the Information Systems Technology AAS degree, Computer Programmer specialization. It is a course for students interested in developing advanced knowledge of C# programming and may be used as an elective for the Microcomputer Applications and Internet Applications Development specializations of the Information Systems Technology AAS degree.

Course Prerequisites/Co-requisites:
Prerequisite: ITP 136 or equivalent

Course Objectives:
Upon completing the course, the student will be able to
1. Develop a three-tier C# application using object-oriented architecture.
2. Use C# to build an Entity Framework or LINQ-to-SQL layer to access data.
3. Use C# to build a POCO (Plain Old CLR Object) business layer.
4. Use C# to build user interface.

Major Topics to be Included:
1. Object-Oriented Programming
2. Writing and Handling Events
3. LINQ
4. T-SQL
5. Unit Testing
6. Office Documents

Effective Date of Course Content Summary: August 15, 2013