COMC 1730: Introduction to Programming with .Net

A. COURSE DESCRIPTION

   Credits: 3
   Lecture Hours/Week: 2
   Lab Hours/Week: 2
   OJT Hours/Week: *.*
   Prerequisites: None
   Corequisites: None
   MnTC Goals: None

   This course introduces programming concepts using Microsoft’s .Net framework. Course includes: form layout, event-driven Windows and WebForms programming concepts, variables and data types, variable and control initialization, operators, objects and properties, control structures (if-else, for & while loops), arrays, functions, properties, parameter passing, source control, and unit testing. No previous programming experience is required. (3 credits: 2 lecture/1 lab)

B. COURSE EFFECTIVE DATES: 01/10/2018 - Present

C. OUTLINE OF MAJOR CONTENT AREAS

   1. Data types, variables, objects, properties
   2. GUI, event-driven programs
   3. Control structures: if-else, loops, functions, parameters
D. LEARNING OUTCOMES (General)

1. use IDE's common menu bar functions
2. use IDE's common tool bar functions
3. use IDE's common toolbox functions
4. use Windows Form design tools
5. use Web Forms design tools
6. use common project window functions
7. use common properties window functions
8. add and format common form controls
9. set common object properties
10. create simple event procedure code
11. test programs
12. save, commit, and push source code using source control
13. choose appropriate variable types
14. perform variable and control initialization
15. perform text to numeric type conversion
16. perform numeric output formatting
17. evaluate variable scope issues
18. use arithmetic operators
19. use string operators
20. use comparison operators
21. use logical operators
22. evaluate operator precedence
23. use common .Net functions
24. use comments
25. use cut-paste functions
26. use search-replace functions
27. use common form controls
28. use if-else control structure
29. create multi-form projects
30. use debug window
31. use "for" looping structure
32. use "while" looping structure
33. use "do while" looping structure
34. use variable arrays
35. create user-defined sub procedure
36. use common select controls
37. create user-defined function
38. perform procedure/function parameter passing
39. perform unit tests
40. use Visual Studio Git source control plugin features
41. display professional attitude
E. Minnesota Transfer Curriculum Goal Area(s) and Competencies
   None

F. LEARNER OUTCOMES ASSESSMENT
   As noted on course syllabus

G. SPECIAL INFORMATION
   This course was previously COMC2730 Intro to Visual Basic.Net