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
D. LEARNING OUTCOMES (General)
1. Use common menu bar functions
2. Use common tool bar functions
3. Use 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. Create common display objects
9. Set common object properties
10. Use control size & location properties
11. Use control text & caption properties
12. Use font properties
13. Create simple event procedure code
14. Test programs
15. Save programs
16. Describe compiler concepts
17. Describe interpreter concepts
18. Describe variable type concepts
19. Choose appropriate variable types
20. Perform variable and control initialization
21. Perform text to numeric type conversion
22. Perform numeric output formatting
23. Describe variable scope concepts
24. Use arithmetic operators
25. Use string operators
26. Use comparison operators
27. Use logical operators
28. Evaluate operator precedence
29. Use common Visual Basic functions
30. Use comments
31. Use cut-paste functions
32. Use search-replace functions
33. Describe object methods
34. Use common object methods
35. Use picture box objects
36. Use label objects
37. Use text box objects
38. Use command button objects
39. Use checkbox objects
40. Use option button objects
41. Use scroll bar objects
42. Use if-else control structure
43. Create multi-form projects
44. Use debug window
45. Use "for" looping structure
46. Use "while" looping structure
47. Use "do while" looping structure
48. Use variable arrays
49. Use list box controls
50. Create user-defined sub procedure
51. Create user-defined function
52. Perform procedure/function parameter passing
53. Perform unit tests
54. Use Git source control functions
55. 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