NORMANDALE COMMUNITY COLLEGE
COMMON COURSE OUTLINE

I.   **Effective Date of outline**
Fall Semester, 2016. To be reviewed by department annually.

II.   **Catalog Description**
COMT 1205 Introduction to Visual Basic
3 credits
Offered: Fall
Prerequisites: COMT 1107 or consent of instructor
Course description: Introductory course in application development using the Visual Basic .NET programming language. The course is project oriented to teach students to build their own custom windows applications. Includes using control structures, developing sub procedures and function procedures, error handling, debugging procedures and using the Visual Basic Graphical User Interface.

III.   **Recommended Entry Skills/Knowledge**
Reading level 3, English level 2, Math level 1

IV.   **Major Content Areas (Topics)**
Overview of latest .NET Framework and Integrated Development Environment (IDE) within Microsoft Visual Studio .NET, standard programming controls, variables, arithmetic operations, user interface design, program design and implementation, decision structure, and error trapping and handling

V.   **Learning Outcomes**
Upon successful completion of the course, the student should be able to:
a.   understand and apply the fundamentals .NET Framework, Visual Studio .NET IDE
b.   understand and apply the multi-step process of building Windows applications using Visual Basic, illustrate application-building techniques
c.   use the capabilities of building applications in a graphical development environment
d.   demonstrate proper use of standard Visual Basic .NET controls
e.   demonstrate effective user interface design
f.   demonstrate program design and coding
g.   understand and utilize variables, and arithmetic operations
h.   understand and utilize decision structures and looping structures
i.   utilize effective Error Trapping and Exception handling techniques
j.   discuss the concept of Object Oriented Programming

VI.   **Methods Used for Evaluation of Student Learning**
Unit exams, final exam, classroom participation, in-class projects, out-of-class projects

VII.   **Special Information**
None