

COLLEGE OF BUSINESS STANDARD COURSE OUTLINE

I. General Information

Course Number:	IS 340
Course Title:	Business Application Programming
Units:	3
Prerequisite:	IS 300
Course Coordinator:	Melody Kiang/ Khosrow Moshirvaziri
SCO prepared by:	Melody Kiang
Date prepared/revised:	Oct. 4, 2012

II. Catalog Description

Object-oriented programming (OOP). Labels, buttons and text boxes, menus, dialog boxes and multiple forms, arrays, and drag-and-drop functions. Accessing database files. Concepts ranging from simple to advanced. Visual programming systems. Letter grade only (A-F).

III. Curriculum Justification(s)

Business application program is the core component of an enterprise information system. It can assist the daily operations of all business functions including finance, accounting, marketing, supply chain, human resources, and other aspects of management. Information Systems employees need to be able to trouble shoot and maintain existing information systems, migrating legacy systems, and analyze and design new enterprise information systems that implements state of the art information technologies. Object-oriented programming was developed as the dominant programming methodology in the early and mid 1990s and its dominance was furthered by the increasing popularity of graphical user interfaces. Visual Basic (VB) .NET object-oriented programming was one of the first systems that made it practical to write programs for the Windows operating system and is one of the most popular Windows-based programming languages used in today's business. Learning the knowledge of VB .NET will greatly enhance the readiness of our Information Systems students for the rising competition in the digital business environment. In addition, learning a programming language provides sophisticated and intellectually challenging experience for interacting with a computer. Studying the basic concepts behind different algorithms of computation can provide insight into not only the field of information systems, but in virtually every aspect of operation. It can therefore increase students' intellectual depth and help them to think productively in many different business contexts.

Upon completion, the student will meet the following four specific CBA learning goals:

- Learning Goal #1 – Critical Thinking
- Learning Goal #3 – Team and interpersonal skills
- Learning Goal #4 – Communication skills
- Learning Goal #6 – Quantitative and Technical Skills

IV. Course Objectives

Students who pass IS 340 must demonstrate ...

- 1) understanding of object-oriented programming language concepts,
- 2) knowledge of VB.NET application at design-time and run-time, Common Language Runtime and VB.NET Class Libraries,
- 3) knowledge of user interface design issues and techniques,
- 4) knowledge of VB.NET language concepts and constructs,
- 5) knowledge of techniques to link database and VB.NET application in business, and
- 6) ability to use VB.NET as a platform to develop enterprise applications

V. Outline of Subject Matter

- * Introduction to the Object-Oriented Programming Language (Visual Basic)
- * User Interface Design
- * Variables, Constants, and Calculations
- * Decisions and Conditions
- * Menus, Common Dialog Boxes, Sub Procedures, and Function Procedures
- * Multiform Projects
- * Lists, Loops, and Printing
- * Arrays and Data Files
- * Database Applications
- * Graphics, Animation, and Sound

VI. Methods of Instruction

In this hands-on instructor-led business application language course, students learn the fundamental skills that are required to design and develop object-oriented applications for Microsoft Windows using Visual Studio .NET development environment. After each major topic is introduced students undertake short exercises to ensure their understanding of the essential concepts. The course covers all important object-oriented topics you need to understand to develop using Visual Basic (VB) .NET framework. Depending on the individual instructors, opportunities for class discussion, group work, and student presentations may be considered. Instructors are strongly encouraged to introduce real-life cases of how VB .NET can be used to develop applications for various business functional areas, such as Accounting, Finance, Marketing, Human Resource

Management, Operational processes, and General Management. Students will be able to create attractive and useful applications that fully exploit the graphical user interface (GUI). Planning and writing event-driven, object-oriented programs(OOP); documentation and debugging techniques; understanding objects, properties, methods, and events; use of control structures, lists and arrays, and accessing a database. The class provides extensive hands-on experience on a Windows-based PC.

Extend and Nature of Technology Use

Instructors must assign homework, exercises, and projects that involve design and implementation of business related application programs.

Required Texts

Programming in Visual Basic 2010, by Julia Case Bradley and Anita C. Millsbaugh. Published by Career Education; Apr. 2011. ISBN: 978-0073517254

Required Software

Microsoft Visual Basic 2010

VII. Instructional Policies Requirements

A. Assessment Criteria

Homework

Students will complete individual homework profiling their competence in various subject matters.

Quizzes and Exams

Students will complete quizzes (optional), mid-term exam (required; at least one), and final exam (required).

Projects

Instructors are strongly encouraged to assign comprehensive course project (individual or group) that requires problem solving and uses of the business programming language and/or database technologies to develop real-world business application systems.

B. Required Statement

In compliance with university policy: Final grades will be based on at least three, and preferably four or more, demonstrations of competence. In no case will the grade on any class tests count for more than one-third of the course grade.

C. Attendance, Withdrawal, Late Assignments

Students are expected to attend courses and turn in assignments on time. Specific attendance and late assignment policies are up to each individual instructor's discretion. The withdrawal policy is the same as that of the university.

D. Disabilities

Students with disabilities are responsible for notifying their instructor as early as possible of their needs for an accommodation of a verified disability. A student with a disability is urged to consult with Disabled Student Services as soon as possible in order to identify possible accommodations to enhance academic success.