COURSE SYLLABUS

Tunxis Community College

Education That Works For a Lifetime

Course Title:	Advanced Visual Basic	**Date submitted:**	May 2019 AAC: 19-25
Department:	Business and Technology		
Curriculum:	Computer Information system		

Course Descriptors: Make certain that the course descriptors are consistent with college and Board of Trustees policies, and the current course numbering system.

Course Code: (eg. ACC 101)	CSC*208
Course Type:	X

A: Clinical B: Lab D: Distance Learning
I: Individual/Independent L: Lecture M: Seminar N: Internship
P: Practicum U: Studio X: Combined Lecture/Lab
Y: Combined Lecture/ Clinical/Lab Z: Combined Lecture/Studio

Elective Type:	G/LAS

E: English FA: Fine Arts FL: Foreign Language G: General
HI: History HU: Humanities LAS: Liberal Arts & Sciences M: Math
S: Science SS: Social Science

Credit Hours:	4
Developmental: (yes/no)	No
Contact Hours: Lecture:	2
Clinical:	0
Lab:	2
Studio	0
Other:	0
TOTAL:	4
Class Maximum:	24
Semesters Offered:	F/Sp/Su

Prerequisites:

C- or better in Programming Logic and Design with Visual Basic (CSC*126)

Corequisites:

None

Other Requirements:

None

Catalog Course Description:

Examines how to utilize advanced features of VB.NET and the .NET Framework in order to build sophisticated, scalable, high-performing applications. Students will apply inheritance, interfaces and polymorphism in designing Visual Basic project. Students will create well-designed ASP.NET web and windows user interface. Students will learn integrating SQL, ACCESS or other database into Visual Basic with LINQ. Students also explore how to create and consume WCF services to build distributed systems. Finally, students will learn how to deploy windows and ASP.NET applications.

Topical Outline: List course content in outline format.

1. Input Validation
2. Collections
3. Database Applications
4. Classes and Advanced classes
5. LINQ to SQL
6. Creating and Programming Web Applications
7. Creating Web Applications with Databases
8. Using Web Services and Windows Presentation Foundation (WPF)
9. Creating Help files

Outcomes: Describe measurable skills or knowledge that students should be able to demonstrate as

Upon successful completion of this course, the student will be able to do the following:

COURSE:

1. Create Application using available Databases
2. Create Web based Database application

evidence that they have mastered the course content.	3. Develop new Classes and Collections 4. Create and use SQL server Database
	PROGRAM: *(Numbering reflects Program Outcomes as they appear in the college catalog)* **Computer Information Systems Associate Degree** 3. solve computer-related problems 4. apply the use of the Program Development Life Cycle 5. practical knowledge of a high-level programming language such as Java, C++ or Visual Basic **CIS: Programming Option and Honors Computer Science/Mathematics** 3. apply object-oriented programming techniques in a variety of programming languages 6. apply programming skills and constructs to develop large-scale programs and applicationssolve computer-related problems 7. apply the use of the Program Development Life Cycle 8. practical knowledge of a high-level programming language such as Java, C++ or Visual Basic **CIS: Programming Option** 4. apply object-oriented programming techniques in a variety of programming languages 9. apply programming skills and constructs to develop large-scale programs and applications
	GENERAL EDUCATION: *(Numbering reflects General Education Outcomes as they appear in the college catalog)* 2. **Critical Analysis/ Logical Thinking -** Students will be able to organize, interpret, and evaluate evidence and ideas within and across disciplines; draw reasoned inferences and defensible conclusions; and solve problems and make decisions based on analytical processes. **Demonstrates**: Identifies the issue(s); formulates an argument; explains and analyzes relationships clearly; draws reasonable inferences and conclusions that are logical and defensible; provides support by evaluating credible sources of evidence necessary to justify conclusions. **Does Not Demonstrate:** Identifies few or no issues; formulates an argument without significant focus; provides an unclear explanation of analysis and relationships; drawing few reasonable inferences and conclusions that are illogical and indefensible; provides little to no support using credible sources of evidence necessary to justify conclusions.
Evaluation: List how the above outcomes will be assessed	**Assessment will be based on the following criteria:** 1. At least three examinations will be given. 2. At least six programming projects will be given. 3. One or more of these projects will be uploaded to ePortfolio.
Instructional Resources: List library (e.g. books, journals, on-line resources), technological (e.g. Smartboard, software), and other resources (e.g. equipment, supplies, facilities) required and desired to teach this course.	**Required:** 1. Microsoft Visual Studio (current version) **2.** Room will require Media Control System (Computer and multimedia projector)
Textbook(s)	Textbook: Refer to current academic year printout