

Course Objectives: The main objective of this course is to provide the student with rapid application development technology using Microsoft Visual Basic 2012 software within the Visual Studio S/W package. This is an industry standard for quick Windows application software development. Principal topics include GUI controls, event handling, graphics, exception handling, file I/O, and an introduction to data base access and ASP.NET applications. Specifically, at the completion of the course students will be able to describe, design and use Visual Basic features including but not limited to the following:

- User interface design (GUI)
- Variables, constants and calculations
- Decisions and conditions
- Repetition and loops
- Lists, menus, common dialog boxes
- Sub procedures and functions
- Multiform projects
- Arrays and elementary structures
- Limited Database applications
- Data file manipulation
- Basics of Object Oriented programming
- Elementary graphics, animation and sound

Course Pace: Although there is flexibility in when the student works on this course, it is not self-paced. Assignments, with due dates, will be released throughout the semester.

Course Evaluation: Course evaluation will be based on computer assignments, quizzes, frequent and meaningful participation in discussions, and the final mini project. The final grade for this course will be determined by the following percentages:

| | |
|------------------------------|-----|
| Homework Assignments | 45% |
| Mid-term Exam | 20% |
| Final Exam/Project | 25% |
| Attendance and Participation | 10% |

Class Assignments: Class assignments should be submitted on or before the due date. An assignment will lose 25% of the score for that assignment if submitted late. No assignments will be accepted after the cutoff date. Assignments will be graded on professionalism, accuracy, style and completeness. The details for each assignment, including work to be done and the due date and cutoff date, will be discussed in class and possibly posted in that assignment's description in Blackboard.

Quizzes: Exams will include some multiple-choice questions and small programming projects, and will cover material from the text, assignments, and presentations.

Course grades: Grades will be assigned as objectively as possible, approximately according to the following scale (with plus or minus, as appropriate):

| | |
|---------------|---|
| 89 - 100% | A |
| 77 - 88% | B |
| 65 - 76% | C |
| 53 - 64% | D |
| 52% and Below | F |

Withdrawing from the course: A student who simply stops submitting work will receive the grade earned on that work, usually a failing grade. To receive a "W" grade instead, apply for a withdrawal through the registrar's office by December 10th. A "W" will be entered on the student transcript but will not be included in the calculation of the GPA. "N" grades may also be used.

Academic Integrity: Students are expected to do their own work in this class. Working together to better understand the material is acceptable. Submitting duplicate work is not and will adversely affect the assignment grade. Actively participating in the discussion boards both to ask and to answer questions is generally expected of all students. Posting of detailed instructions for "how to" responses to questions is encouraged but posting of a complete solution is not. Example violations include but are not limited to:

- Copying or sharing a file or any portion of a file from another student.
- Sharing or allowing another student to copy your files or any portion of a file.
- Duplicating or distributing copies licenses for software programs and/or services.
- Obtaining solution from unauthorized internet sources.

Students with Disabilities: If you are a student with a disability and believe you will need support services and/or accommodations for this class, please contact the Disabilities Support Services at TRCC. Please note that the instructor cannot provide accommodations based upon disability until the instructor has received an accommodation letter from the Disabilities Counselor.

Course Outline

| Week | Topics | Approximate Due Dates | Text Assignments |
|-------------|---|------------------------------|-------------------------|
| 1 | Introduction to Computers and Problem Solving | 8/28 | Chapter 1 |
| 2 | Visual Basic Controls and Events | 9/4 | Chapter 2 |
| 3 | Variables, Input and Output | 9/11 | Chapter 3 |
| 4 | Decisions | 9/18 | Chapter 4 |
| 5-6 | General Procedures | 10/2 | Chapter 5 |
| 7 | Repetition | 10/16 | Chapter 6 |
| 8 | Mid-Term Exam | 10/16 | |
| 9-10 | Arrays | 11/6 | Chapter 7 |
| 11-12 | Text Files | 11/20 | Chapter 8 |
| 13 | Additional Controls and Objects | 12/4 | Chapter 9 |
| 14 | Introduction to Databases and Object-Oriented Programming | 12/11 | Chapters 10 and 11 |
| 15 | Final Exam/Final Project | 12/11 | |

Note: This course outline is subject to change as conditions warrant.