EASTERN MEDITERRANEAN UNIVERSITY
SCHOOL OF COMPUTING AND TECHNOLOGY
DEPARTMENT OF COMPUTER PROGRAMMING
COURSE POLICY SHEET

Course Title	Visual Programming
Course Code	ITEC318
Type	Full Time
Semester	Fall / Spring
Category	AE (Area Elective)
Workload	180 Hours
EMU Credit	(3,1,0) 3
Prerequisite	-
Language	English
Level	Fourth Year
Teaching Format	3 Hours Lecture, 1 Hour Laboratory per week
ECTS Credit	6
Course Web Site	http://staff.emu.edu.tr/akileoday

Instructor(s)	Akile Oday	**Office Tel**	+90 392 6301183
E-mail	akile.oday@emu.edu.tr	**Office No**	CT114

Course Description

This course has been designed for programmers wishing to acquire the capability to write sophisticated event driven applications, or those requiring an understanding of the capabilities of VB.Net. This course allows the programmer to develop applications that run under Windows and/or Web browser. It also provides an opportunity to study more on controls, Database applications on VB.NET. No assumed knowledge is required for this course.

General Learning Outcomes

On successful completion of this course students should able to:

- Explain the difference between event-driven programming and command-line programming.
- Design, code, test, and debug simple event-driven programs that respond to user events.
- Develop code that responds to exception conditions raised during execution.

Teaching Methodology / Classroom Procedures

- The students are expected to be active learners in this course. The teaching methodology of this course is based on a lecture based discussion of concepts followed by supervised as well as unsupervised applications of these concepts in Lab. At the end of every major topic discussion, the students will have to work on corresponding Lab assignments where they have to apply the knowledge and skills they learned in class.
- The student will be provided before coming each Lab Session to read Lab Assignments.
- Every week the student has to follow the following :
  - ✓ Three hours of Lectures to learn the basic skills and theoretical information needed.
  - ✓ One hours of supervised Lab applications to apply the information/knowledge given during the lectures
  - ✓ Students are required to attend all classes and all Lab sessions.
  - ✓ Students are expected to carry out the assigned readings, attend quizzes.
- Students are responsible to know and use all the course material placed on the web

(http://courses.sct.emu.edu.tr/it/itec318) and for timely attendance to all quizzes.

- There are 3 case studies as follows:
  - ✓ Case Study#1 (%3)– Chapter2 and Chapter3
  - ✓ Case Study#2 (%4)– Chapter4 and Chapter5
  - ✓ Case Study#3 (%3)– Chapter6
- There are three written quizzes as follows: (Duration of each quiz is 40 minutes)
  - ✓ Quiz#1 (%4)– Chapter2 and Chapter3
  - ✓ Quiz#2 (%6)– Chapter4, Chapter5 and Chapter6
- There is a practical open-book (on computer) midterm exam which covers Chapter1, Chapter2, Chapter3 and Chapter4
- There is a practical open-book (on computer) final exam which covers all topics

Course Materials / Main References
Text Book:
Programming in Visual Basic 2010 / Julia Case Bradley, Anita C. Millspaugh. – International Edition, 2011, ISBN 978-007-132676-6
Lecture Notes:
All course materials are also available online.

Weekly Schedule / Summary of Topics	
	Each chapter begins with identifiable objectives and a brief overview. Numerous coding examples as well as hands-on projects with guidance for the planning and coding appear throughout. Thought-provoking feedback questions give students time to reflect on the current topic and to evaluate their understanding of the details. The end-of-chapter items include a chapter review, questions, programming exercises, and four case studies.
Week 2	***Chapter 1, "Introduction to Visual Basic .NET 2010,"*** introduces Microsoft's Visual Studio integrated development environment (IDE). The single environment is used for multiple programming languages. A step-by-step program gets students into programming very quickly (quicker than most books). The chapter introduces the OOP concepts of objects, properties, methods, and events. The elements of debugging and using the Help system are also introduced.
Week 3 - 4	***Chapter 2, "User Interface Design,"*** demonstrates techniques for good program design, including making the interface easy for users as well as guidelines for designing maintainable programs. Several controls are introduced, including text boxes, group boxes, check boxes, radio buttons, and picture boxes.
Week 5 - 6	***Chapter 3, "Variables, Constants, and Calculations,"*** presents the concepts of using data and declaring the data type. Students learn to follow standards to indicate the data type and scope of variables and constants and always to use Option Strict, which forces adherence to strong data typing. Error handling is accomplished using structured exception handling. The Try/Catch/Finally structure is introduced in this chapter along with calculations. The student learns to display error messages using the MessageBox class and also learns about the OOP concept of overloaded constructors.
Week 7 - 8	***Chapter 4, "Decisions and Conditions,"*** introduces taking alternate actions based on conditions formed with the relational and logical operators. This chapter uses the If statement to validate input data. Multiple decisions are handled with both nested If statements and the Select Case structure. The debugging features of the IDE are covered, including a step-by-step exercise covering stepping through program statements and checking intermediate values during execution.
Week 9 -10	**Midterm Exams**
Week 11 -12	***Chapter 5, "Menus, Common Dialog Boxes, Sub Procedures, and Function Procedures,"*** covers the concepts of writing and calling general sub procedures and function procedures. Students learn to include both menus and context menus in projects, display the Windows common dialog boxes, and use the input provided by the user.
Week 13	***Chapter 6, "Multiform Projects,"*** adds splash forms and About forms to a project. Summary data are presented on a separate form. The Friend keyword is introduced.
Week 14	***Chapter 9, "Web Applications,"*** *introduces Web applications using WebForms. Students learn to deisgn and develop simple Web applications that consist of Web pages that execute in a browser application. Multiple-page Web sites are covered along with validator controls.*
Week 15	***Chapter 10, " Database Applications,"*** introduces ADO.NET, which is Microsoft's latest technology for accessing data in a database. This chapter shows how to create binding sources, table adapters, and datasets. Programs include accessing data from Windows Forms . Students learn to bind data tables to a data grid and bind individual data fields to controls such as labels and text boxes.
Week 16 - 18	**Final Exams**

Requirements
▪ Each student can have only one make-up exam. One who misses an exam should provide a medical report within 3 days after the missed exam. The make-up exam will be organized at the end of the term after the finals and will cover all the topics.

- No make-up exam will be given for the quizzes.
- Students should follow the announcement in the course web site.

Method of Assessment					
Evaluation and Grading	**Quizzes**	**Assignments**	**Lab**	**Midterm Exam**	**Final Exam**
Percentage	10 %	10 %	10 %	30 %	40 %

Grading Criteria *											
A	**A-**	**B+**	**B**	**B-**	**C+**	**C**	**C-**	**D+**	**D**	**D-**	**F**
90 -100	85 - 89	80 - 84	75 - 79	70 - 74	65 - 69	60 - 64	56 - 59	53 - 55	50 - 52	40 - 49	0 – 39

* Letter grades will be decided upon after calculating the averages at the end of the semester and distribution of the averages will play a significant role in the evaluation of the letter grades.