| Module Title: | Visual Programming |
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| Module ID: | CAP 211 |
| Prerequisite: | CSC 113 |
| Level: | 3 |
| Credit Hours: | 3 (2+2+0) |

Module Description:

This course involves using an Object Oriented Programming language like Java to cover the fundamentals of visual programming; Topics include files manipulation; related data structures; exception handling and Graphical User Interfaces (SWING technology, event handling and models), Developing applications for the web environment; Basic concepts of Human Computer Interaction; Comparison between the selected language and other visual languages. A large programming project is given in phases to develop a large application with an OO language.

Module Aims:

The aim of this course is to understand how to implement Object Oriented Programming language

Learning Outcomes:

- Ability to analyze a real business problem
- Ability to develop a software application
- Ability to debug software
- ability to using Microsoft Visual basic.Net
- Understand the visual programming concepts.
- Acquaintance IDE of visual studio .NET
- The ability to work independently to accomplish assigned tasks.
- The ability to communicate and to discuss related topics of the course with instructor inside and outside class.
- Acquaintance of using internet to get information related to the course

| List of Topics | | Contact Hours |
|---|---|------------------|
| Introduction to Programming Concept /Microsoft Visual Basic | 1 | 3 |
| Forms/ Controls / GUI | 2 | 6 |
| Variables and Constant | 1 | 3 |
| Making Decision | | 6 |
| Loops - Menus | | 9 |
| Data Structure | | 9 |
| Building Windows Application and Errors | 3 | 9 |

Textbook:

Deitel & Deitel, the Complete JAVA 2, 2002, Prentice-Hall.

Deitel & Deitel, VisualBasic.NET; How to program, 2002; Prentice-Hall

JAVA How to Program, H. M. Deitel, P. J. Deitel,6th addition, 2004 Prentice Hall