

Syrian Arab Republic	 الجامعة الافتراضية السورية SYRIAN VIRTUAL UNIVERSITY	الجمهورية العربية السورية
Ministry of Higher Education		وزارة التعليم العالي
Syrian Virtual University		الجامعة الافتراضية السورية

## Course Definition File Visual Programming

### 1- Basic Information:

<b>Course Name</b>	<b>Visual Programming</b>
<b>Course ID</b>	<b>VP</b>
<b>Contact Hours (Registered Sessions)</b>	18
<b>Contact Hours (Synchronized Sessions)</b>	18
<b>Mid Term Exam</b>	NO
<b>Exam</b>	2
<b>Registered Sessions Work Load</b>	36
<b>Synchronized Session Work Load</b>	18
<b>Credit Hours</b>	4

### 2- Pre-Requisites:

Course	ID
Introduction to Programming	

### 3- Course General Objectives:

Students learn in this course how to develop windows forms applications: using different controls, writing controls events and binding with databases.

### 4- Intended Learning Outcomes (ILO):

Learning Outcomes codes	Learning Outcomes
LO1	Building Windows Applications using Visual Studio 2013.
LO2	Using Windows Controls.
LO3	Events Programming.
LO4	Using Lists.
LO5	Using advanced controls.
LO6	Create multiple documents interface.
LO7	Learn visual inheritance.
LO8	Build custom controls.

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<b>LO9</b>	Learn drawing.
<b>LO10</b>	Learn LINQ basics.
<b>LO11</b>	Binding with databases.

## 5- Course Content

LO	Course Syllabus	Recorded Sessions	Synchronized Sessions	Type	Additional Notes
<b>LO1</b>	Building Windows Applications using Visual Studio 2013	2	1	<input checked="" type="checkbox"/> Exercises <input checked="" type="checkbox"/> Assignments <input type="checkbox"/> Seminars <input type="checkbox"/> Projects <input checked="" type="checkbox"/> Practices <input type="checkbox"/> Others	Visual Studio 2013
<b>LO2</b>	Using Windows Controls	2	1	<input checked="" type="checkbox"/> Exercises <input checked="" type="checkbox"/> Assignments <input type="checkbox"/> Seminars <input type="checkbox"/> Projects <input checked="" type="checkbox"/> Practices <input type="checkbox"/> Others	Visual Studio 2013
<b>LO3</b>	Events Programming	1	1	<input checked="" type="checkbox"/> Exercises <input checked="" type="checkbox"/> Assignments <input type="checkbox"/> Seminars <input type="checkbox"/> Projects <input checked="" type="checkbox"/> Practices <input type="checkbox"/> Others	Visual Studio 2013
<b>LO4</b>	Using Lists	2	2	<input checked="" type="checkbox"/> Exercises <input checked="" type="checkbox"/> Assignments <input type="checkbox"/> Seminars <input type="checkbox"/> Projects <input checked="" type="checkbox"/> Practices <input type="checkbox"/> Others	Visual Studio 2013
<b>LO5</b>	Using advanced controls	1	1	<input checked="" type="checkbox"/> Exercises <input checked="" type="checkbox"/> Assignments <input type="checkbox"/> Seminars <input type="checkbox"/> Projects <input checked="" type="checkbox"/> Practices <input type="checkbox"/> Others	Visual Studio 2013
<b>LO6</b>	Create multiple documents	1	1	<input checked="" type="checkbox"/> Exercises	Visual Studio 2013

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	interface			<input checked="" type="checkbox"/> Assignments <input type="checkbox"/> Seminars <input type="checkbox"/> Projects <input checked="" type="checkbox"/> Practices <input type="checkbox"/> Others	
<b>LO7</b>	Learn visual inheritance	1	1	<input checked="" type="checkbox"/> Exercises <input checked="" type="checkbox"/> Assignments <input type="checkbox"/> Seminars <input type="checkbox"/> Projects <input checked="" type="checkbox"/> Practices <input type="checkbox"/> Others	Visual Studio 2013
<b>LO8</b>	Build custom controls	1	1	<input checked="" type="checkbox"/> Exercises <input checked="" type="checkbox"/> Assignments <input type="checkbox"/> Seminars <input type="checkbox"/> Projects <input checked="" type="checkbox"/> Practices <input type="checkbox"/> Others	Visual Studio 2013
<b>LO9</b>	Learn drawing	2	2	<input checked="" type="checkbox"/> Exercises <input checked="" type="checkbox"/> Assignments <input type="checkbox"/> Seminars <input type="checkbox"/> Projects <input checked="" type="checkbox"/> Practices <input type="checkbox"/> Others	Visual Studio 2013
<b>LO10</b>	Learn LINQ basics	2	2	<input checked="" type="checkbox"/> Exercises <input checked="" type="checkbox"/> Assignments <input type="checkbox"/> Seminars <input type="checkbox"/> Projects <input checked="" type="checkbox"/> Practices <input type="checkbox"/> Others	Visual Studio 2013
<b>LO11</b>	Binding with databases	3	5	<input checked="" type="checkbox"/> Exercises <input checked="" type="checkbox"/> Assignments <input type="checkbox"/> Seminars <input type="checkbox"/> Projects <input checked="" type="checkbox"/> Practices <input type="checkbox"/> Others	Visual Studio 2013

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## 6- Assessment Criteria (Related to ILOs)

LO Code	LO	Assessment Type				
		Interactive Synchronized Collaboration	Practice	Exams	Presentations And Face-to-Face Assessments	Reports
LO1	Building Windows Applications using Visual Studio 2013	X	X	X		
LO2	Using Windows Controls	X	X	X		
LO3	Events Programming	X	X	X		
LO4	Using Lists	X	X	X		
LO5	Using advanced controls	X	X	X		
LO6	Create multiple documents interface	X	X	X		
LO7	Learn visual inheritance	X	X	X		
LO8	Build custom controls	X	X	X		
LO9	Learn drawing	X	X	X		
LO10	Learn LINQ basics	X	X	X		
LO11	Binding with databases	X	X	X		

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### 7- Course Syllabus (18 hours of total synchronized sessions)

Chapter	Contents	
(1) Windows Application Basics	Visual Studio 2013	<ul style="list-style-type: none"> <li>Start using Visual Studio 2013</li> </ul>
	Windows Forms	<ul style="list-style-type: none"> <li>Windows Forms</li> </ul>
	Event Handling	<ul style="list-style-type: none"> <li>Event-Driven GUI</li> <li>Delegates</li> <li>Events Parameters</li> </ul>
	Controls Properties	<ul style="list-style-type: none"> <li>Controls Properties</li> </ul>
(2) Controls 1	Controls	<ul style="list-style-type: none"> <li>Labels</li> <li>Text Boxes</li> <li>Buttons</li> </ul>
	Controls	<ul style="list-style-type: none"> <li>Group Boxes</li> <li>Panels</li> </ul>
	Controls	<ul style="list-style-type: none"> <li>Check Boxes</li> <li>Radio Buttons</li> </ul>
(3) Controls 2	Controls	<ul style="list-style-type: none"> <li>Picture Boxes</li> <li>ToolTips</li> </ul>
	Controls	<ul style="list-style-type: none"> <li>NumericUpDown</li> </ul>
	Mouse Events	<ul style="list-style-type: none"> <li>Mouse Events</li> </ul>
	Keyboard Events	<ul style="list-style-type: none"> <li>Keyboard Events</li> </ul>
(4) Controls 3	Menus	<ul style="list-style-type: none"> <li>Menus</li> </ul>
	Date Time Controls	<ul style="list-style-type: none"> <li>MonthCalender</li> <li>DateTimePicker</li> </ul>
	LinkLabel	<ul style="list-style-type: none"> <li>LinkLabel</li> </ul>
(5) Controls	Lists	<ul style="list-style-type: none"> <li>List Box</li> </ul>
	Lists	<ul style="list-style-type: none"> <li>Checked List Box</li> </ul>

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	Lists	<ul style="list-style-type: none"> <li>• ComboBox</li> </ul>
(6) Controls 5	TreeView	<ul style="list-style-type: none"> <li>• TreeView</li> </ul>
	ListView	<ul style="list-style-type: none"> <li>• ListView</li> </ul>
	TabControl	<ul style="list-style-type: none"> <li>• TabControl</li> </ul>
(7) Advanced Topics	Multiple Documents Interface	<ul style="list-style-type: none"> <li>• MDI</li> </ul>
	Visual Inheritance	<ul style="list-style-type: none"> <li>• Visual Inheritance</li> </ul>
	User-Defined Controls	<ul style="list-style-type: none"> <li>• User-Defined Controls</li> </ul>
(8) Graphics	Graphics	<ul style="list-style-type: none"> <li>• Graphics Classes</li> <li>• Colors</li> <li>• ColorDialog</li> </ul>
	Fonts	<ul style="list-style-type: none"> <li>• Font Metrics</li> </ul>
	Drawing Shapes	<ul style="list-style-type: none"> <li>• Lines</li> <li>• Rectangles</li> <li>• Ellipses</li> </ul>
(9) LINQ Basics	LINQ	<ul style="list-style-type: none"> <li>• var</li> <li>• where</li> <li>• select</li> <li>• orderby</li> </ul>
	LINQ	<ul style="list-style-type: none"> <li>• Create unknown type in select</li> <li>• Query from objects arrays</li> <li>• Create new type in select</li> </ul>
(10) Databases 1	Data Model Class Library	<ul style="list-style-type: none"> <li>• Create ADO.NET Entity Data Model Class Library</li> </ul>
	Create applications	<ul style="list-style-type: none"> <li>• Linking Controls and Entities</li> </ul>
(11) Databases 2	Dynamic Binding with Queries	<ul style="list-style-type: none"> <li>• Dynamic Binding with Queries</li> </ul>

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	Retrieving data from multiple tables	<ul style="list-style-type: none"> <li>Retrieving data from multiple tables using LINQ</li> </ul>
	Create Master/Details forms	<ul style="list-style-type: none"> <li>Create Master/Details forms</li> </ul>
(12) Databases 3	Binding with single value	<ul style="list-style-type: none"> <li>Binding with single value</li> </ul>
	Binding with collections	<ul style="list-style-type: none"> <li>Binding with collections</li> </ul>

#### 8- Practice Tools:

Tool Name	Description
Visual Studio 2013	