Philadelphia University
Faculty of Information Technology
Department of Applied Computer Science
Second semester, 2010/2011

Course Syllabus	
Course Title: Windows Programming	**Course code: 761211**
Course Level: 1	**Course prerequisite (s) and/or corequisite (s):** 710104 Department Agreement
Lecture Time: 11:15-12:45	**Credit hours: 3**

Academic Staff Specifics				
Name	**Rank**	**Office Number and Location**	**Office Hours**	**E-mail Address**
Dr. Mohammad Taye	Assistant Professor	**IT323**	**11:10-12:00** **12:00-13:00**	mtaye@philadelphia.edu.jo

Course module description:

The course provides the features that are most important to windows programmer, such as object-oriented programming, graphics, graphical-user-interface (GUI) components, exception handling, multithreading, multimedia, file processing, prepackaged data structures, database processing, Internet and World-Wide-Web-based client/server networking and distributed computing. The language is appropriate for implementing Internet and World-Wide-Web-based applications.

Course module objectives:
This course aims to provide students capabilities to design and implement the applications using visual programming through Microsoft Visual Studio .Net. and VC# to develop different types of applications using .Net platform

Course/ module components
Books (title , author (s), publisher, year of publication)
> Title: " C# How to Program".
> Author(s)/Editor(s): H. M. Deitel & J. Deitel.
> Publisher: Prentice Hall, 2001
> ISBN**:** 0-13-062221-4

Teaching methods:
Duration: 15 weeks, 60 hours in total
Lectures: 45 hours, 3 per week + two exams (two hours)

Tutorial in the Lab.: 30 hours, 2 per week (except the last week)

Learning outcomes:
- Knowledge and understanding

-Have knowledge and understanding of the overall concepts of computer graphics (A)

- Cognitive skills (thinking and analysis).

-Able to perform 2D graphics with lines, curves and can implement algorithms to rasterize shapes.

-Able to use 2D and 3D graphics and implement them**.**

- Communication skills (personal and academic).

-Have the ability to design and implement Group projects

- Practical and subject specific skills (Transferable Skills).

-Have practical skills in the usage of OpenGL Programming

- Able to use C# builds functions or equivalent graphics tools

Assessment instruments
- Short reports and/ or presentations, and/ or Short research projects
- 3 Quizzes.
- Practical works
- Final examination: 50 marks

Allocation of Marks	
Assessment Instruments	**Mark**
First examination	**15**
Second examination	**15**
Final examination: 50 marks	**50**
(Lab) Quizzes & Home works	**20**
Total	**100**

* Make-up exams will be offered for valid reasons only with consent of the Dean. Make-up exams may be different from regular exams in content and format.

Practical Submissions
The assignments that have work to be assessed will be given to the students in separate documents including the due date and appropriate reading material.

Documentation and academic honesty
- **Documentation style (with illustrative examples)**

Submit your home work covered with a sheet containing your name, number, course title and number, and type and number of the home work (e.g. tutorial, assignment, and project).

Any completed homework must be handed in to my office (room IT 306) by 15:00 on the due date. After the deadline "zero" will be awarded. You must keep a duplicate copy of your work because it may be needed while the original is being marked.

You should hand in with your assignments:
1- A printed listing of your test programs (if any).
2- A brief report to explain your findings.
3- Your solution of questions.

For the research report, you are required to write a report similar to a research paper. It should include:

o **Abstract**: It describes the main synopsis of your paper.
o **Introduction**: It provides background information necessary to understand the research and getting readers interested in your subject. The introduction is where you put your problem in context and is likely where the bulk of your sources will appear.
o **Methods (Algorithms and Implementation)**: Describe your methods here. Summarize the algorithms generally, highlight features relevant to your project, and refer readers to your references for further details.
o **Results and Discussion (Benchmarking and Analysis)**: This section is the most important part of your paper. It is here that you demonstrate the work you have accomplished on this project and explain its significance. The quality of your analysis will impact your final grade more than any other component on the paper. You should therefore plan to spend the bulk of your project time not just gathering data, but determining what it ultimately means and deciding how best to showcase these findings.
o **Conclusion**: The conclusion should give your reader the points to "take home" from your paper. It should state clearly what your results demonstrate about the problem you were tackling in the paper. It should also generalize your findings, putting them into a useful context that can be built upon. All generalizations should be supported by your data, however; the discussion should prove these points, so that when the reader gets to the conclusion, the statements are logical and seem self-evident.
o **Bibliography:** Refer to any reference that you used in your assignment. Citations in the body of the paper should refer to a bibliography at the end of the paper.

- **Protection by copyright**
  1. Coursework, laboratory exercises, reports, and essays submitted for assessment must be your own work, unless in the case of group projects a joint effort is expected and is indicated as such.
  2. Use of quotations or data from the work of others is entirely acceptable, and is often very valuable provided that the source of the quotation or data is given Failure to provide a source or put quotation marks around material that is taken from elsewhere gives the appearance that the comments are ostensibly your own. When quoting word-for-word from the work of another person quotation marks or indenting (setting the quotation in from the margin) must be used and the source of the quoted material must be acknowledged.
  3. Sources of quotations used should be listed in full in a bibliography at the end of your piece of work.

- **Avoiding plagiarism.**
  1. Unacknowledged direct copying from the work of another person, or the close paraphrasing of somebody else's work, is called plagiarism and is a serious offence, equated with cheating in examinations. This applies to copying both from other students' work and from published sources such as books, reports or journal articles.
  2. Paraphrasing, when the original statement is still identifiable and has no acknowledgement, is plagiarism. A close paraphrase of another person's work

must have an acknowledgement to the source. It is not acceptable for you to put together unacknowledged passages from the same or from different sources

linking these together with a few words or sentences of your own and changing a few words from the original text: this is regarded as over-dependence on other sources, which is a form of plagiarism.

3. Direct quotations from an earlier piece of your own work, if not attributed, suggest that your work is original, when in fact it is not. The direct copying of one's own writings qualifies as plagiarism if the fact that the work has been or is to be presented elsewhere is not acknowledged.

4. Plagiarism is a serious offence and will always result in imposition of a penalty. In deciding upon the penalty the Department will take into account factors such as the year of study, the extent and proportion of the work that has been plagiarized, and the apparent intent of the student. The penalties that can be imposed range from a minimum of a zero mark for the work (without allowing resubmission) through caution to disciplinary measures (such as suspension or expulsion).

Course/module academic calendar

week	Basic and support material to be covered	Homework/reports and their due dates
(1)	**Introducing the Microsoft .NET Platform Visual Studio.NET IDE:** Introduction, Visual Studio .NET (IDE) Overview, Menu Bar and Toolbar,Visual Studio .NET Windows, Solution Explorer, Toolbox, Properties Window, Using Help, Simple Program: Displaying Text and an Image.	**See Agenda**
(2)	**Graphical User Interface Concepts (Part 1):** Introduction, Windows Forms, Event-Handling Model, Basic Event Handling, Labels, TextBoxes and Buttons	
(3)	**Graphical User Interface Concepts (Part 1):** GroupBoxes and Panels, CheckBoxes and RadioButtons, PictureBoxes, Mouse Event Handling, Keyboard Event Handling, Timer	
(4) & (5)	**Graphical User Interface Concepts (Part 1):** GroupBoxes and Panels, CheckBoxes and RadioButtons, PictureBoxes, Mouse Event Handling, Keyboard Event Handling, Timer	
(6) & (7) **First examination**	**Graphical User Interface Concepts (Part 2):** ComboBoxes, TreeViews, ListViews, Tab Control.	
(8) & (9)	**Graphical User Interface Concepts (Part 2):** Multiple Document Interface (MDI) Windows, Visual Inheritance, User-Defined Controls.	
(10) & (11) **Second examination**	**Graphics and Media: Introduction,** Graphics Contexts and Graphics Objects,Color Control, Font Control, Drawing Lines, Rectangles and Ovals, Drawing Arcs.	
(12)	**Graphics and Media: Introduction:** Drawing Polygons and Polylines, Advanced Graphics Capabilities, Introduction to Multimedia, Loading, Displaying and Scaling Images, Animating a Series of Images, Windows Media Player.	
(13) & (14)	**Files and Streams: Introduction: Data Hierarchy,** Files and Streams, Classes File and Directory, Creating a Sequential-Access File, Reading Data from a Sequential-Access File.**,** ADO.NET and Access database II	
(15) **Specimen examination (Optional)**	**Extensible Markup Language (XML):** Introduction, XML Documents, XML Namespaces, Document Object Model (DOM)	
(16) **Final Examination**		

Expected workload:

On average students need to spend 2 hours of study and preparation for each 50-minute lecture/tutorial.

Attendance policy:

Absence from lectures and/or tutorials shall not exceed 15%. Students who exceed the 15% limit without a medical or emergency excuse acceptable to and approved by the Dean of the relevant college/faculty shall not be allowed to take the final examination and shall receive a mark of zero for the course. If the excuse is approved by the Dean, the student shall be considered to have withdrawn from the course.

Module references

Books
Students will be expected to give the same attention to these references as given to the Module textbooks.
1. A.Turtschi et.al. " Mastering Visual C# .Net", Sybex 2002.Eric Gunnerson, "A Programmer's
2. Introduction to C#", Apress 2000.
3. Anders Hejlsberg et.al. " C# Language Reference", Microsoft Corporation 2000.Erric Buttow et al.
4. "C#, your visual blueprint for building .Net application", Hungry Minds 2002. Charles Carroll
5. "Programming C#", O'Reily & Associates 2000.
6. Karh Watson "Beginning C#" Wrox Press 2001.
7. "Visual C# 2005 How to Program", Second Edition, .Harvey & Paul, J. Deitel, Prentice Hall, 2006

Journals
　　http://www.resonancepub.com/csharpjournal.htm
Websites
　　　www.deitel.com
　　www.csharpe.com