

**COURSE SYLLABUS**  
**Visual Programming**  
**CSC 300**  
**Winter 2012**

**PROFESSOR:** Mr. John Dillon

**CLASSROOM:** D14

**TIME:** Tue 6:00 – 9:30 PM

**OFFICE HOURS:** Tue 5:00 – 6:00

**CONTACT INFORMATION:** email: [jpdillon@clunet.edu](mailto:jpdillon@clunet.edu)

**TEXTBOOK:**

Introduction to Programming Using  
Visual Basic 2008  
(w/VS2008 DVD) (7th Edition)  
David I Schneider  
Prentice-Hall  
ISBN: 978-013212856-8

NOTE: There is a newer edition of the textbook available, which you can use instead. I selected this one because it's more affordable.

**COURSE DESCRIPTION:**

This course introduces the design and implementation of programs that utilize a visual user-interface.

Topics covered will include: use of Microsoft Visual Basic for designing the interface; the message/event driven programming model; logical structure of the program (e.g. separating interface from “business logic”); control containers (e.g. graphics, dialogs, forms); and controls (e.g. button, slider, mouse motion, edit box.) **Programming will be done in Visual Basic, which the student should have installed and operational on the first day of class.**

NOTE 1: This is not “visual programming” in the sense of programs written automatically by diagrams, such as Alice or MST Workshop, but rather “programming for visual (GUI) environments.”

NOTE 2: We are using Visual Basic as our language for teaching, but it is NOT the only choice in the marketplace—many tools and products exist that leverage visual interfaces. Our goal is not so much to learn VB as it is to learn the concepts of visual interface design.

### **GOALS/OBJECTIVES:**

Goal 1: Demonstrate an understanding of how to design a visual (graphical) user interface.

- a) Appropriate usage of various controls under various situations
- b) Grouping of controls into a structure that provides a good user experience

Goal 2: Demonstrate an understanding of how to implement a visual (graphical) user interface.

- a) Design of the user interface using an integrated development environment (IDE)
- b) Separate a program into logical sections: the user interface; the “business logic” (algorithmic code) through the use of programming frameworks and code resources

### **ACADEMIC HONESTY:**

Intellectual property rights are to be respected at all times, with appropriate recognition/reference given to informational sources. Plagiarism occurs whenever a source of any kind has not been acknowledged. Every student must understand the correct procedures for acknowledging and identifying sources of borrowed material. The basic rule is this: Give credit where credit is due. In other words, if you include any material which is beyond your first hand experience, and which is not common knowledge of scholars in your field, you must cite your source in a way that your reader can [a] find the source from the information in your reference and [b] immediately determine which information is your source’s contribution to scholarship and which is yours.

### **GROUP PROJECTS/ACTIVITIES:**

I do not foresee any group projects/activities in this class but if that changes, you will be given specific instructions.

### **GRADING CRITERIA:**

Course grades will be assigned based on your performance on homework assignments, exams, and classroom participation. Homework assignments and exams can usually be assigned objective grades (you either answered the questions correctly or you didn't.)

For programming assignments:

- Fully working program will earn 100%
- Mostly working program will earn between 90% and 100%
- Correct general approach but not working will earn between 80% and 90%
- A legitimate attempt but incorrect approach will earn between 70% and 80%
- A weak attempt, or no attempt at all will earn very little, if anything
- Late programs will lose 10% per late class period

Programs are due at the beginning of the specified class period unless otherwise specified. Anytime after that is considered late. The above scores are dependent on you demonstrating the program for me in class and then turning in the printed code and a brief write-up (to be specified at the time of assignment.) Details will be provided at the time the assignment is given. Come to class prepared. **Do not assume that paper will be available in the classroom printer.**

Classroom participation is naturally somewhat subjective. I realize that some students are more “outgoing” than others and I will take this into consideration as I get to know you.

The university allows for the assignment of +/- grades thus the following scale will be used for homework and exams:

A	100-95	B	86-83	C	76-73	D	66-63
A-	94-90	B-	82-80	C-	72-70	D-	62-60
B+	89-87	C+	79-77	D+	69-67	F	59-0

Your course grade will be determined as follows:

Programming Projects/Homework	40%
Midterm(s) and quizzes	30%
Final Exam	20%
Class participation	10%

### ***Tentative Schedule***

<b>Week</b>	<b>Subjects</b>	<b>Homework Due</b>
1	Visual Basic as a programming language – just one of many! Visual Basic .NET 2010 The .NET Framework Developing a simple one-form application	
2	Toolbox controls Menus and the MainMenu control Access keys Common dialog boxes	Homework 1
3	Variable types and declarations Operators and precedence Basic string and date functions If and Select Case statements	Homework 2
4	For..Next and Do..While Loops Using the debugger Aspects of good user interfaces	Homework 3
5	Midterm	
6	Modules and procedures Classes Class properties and methods	Homework 4
7	Structured error handling Arrays Collections For..Each loops	Homework 5
8	File handling Multiple forms	Homework 6
9	Database integration Bound controls The Datagrid control	Homework 7
10	Graphics and drawing Timers and simple animation	Homework 8
11	Final	

### **Course Evaluations Statement:**

All course evaluations are now conducted online. Your feedback is important to us. You will receive an email message reminding you when the website is open for your feedback. The link is:  
<http://courseval.callutheran.edu>

**ADA Statement:**

California Lutheran University is committed to providing reasonable accommodations in compliance with ADA of 1990 and Section 504 of the Rehabilitation Act of 1973 to students with documented disabilities. If you are a student requesting accommodations for this course, please contact your professor at the beginning of the semester and register with the Accessibility Resource Coordinator, Wendy Perkins, for the facilitation and verification of need. The Accessibility Resource Coordinator is located in the Center for Academic and Accessibility Resources (CAAR) Office in the Pederson Administration building, and can be contacted by calling 805.493.3878 or emailing [wperkins@callutheran.edu](mailto:wperkins@callutheran.edu)

**Statement on Academic Honesty:**

The educational programs of California Lutheran University are designed and dedicated to achieve academic excellence, honesty and integrity at every level of student life. Part of CLU's dedication to academic excellence is our commitment to academic honesty. Students, faculty, staff and administration share the responsibility for maintaining high levels of scholarship on campus. Any behavior or act which might be defined as "deceitful" or "dishonest" will meet with appropriate disciplinary sanctions, including dismissal from the University, suspension, grade F in a course or various forms of academic probation. Policies and procedures regarding academic honesty are contained in the faculty and student handbooks.

Plagiarism, cheating, unethical computer use and facilitation of academic dishonest are examples of behavior which will result in disciplinary sanctions. Plagiarism includes, but is not limited to:

- word for word copying without using quotation marks or presenting the work as yours
- using the ideas or work of others without acknowledgement
- not citing quoted material. Students must cite sources for any information that is not either the result of original research or common knowledge.

**Pearson Library**

At Cal Lutheran we won't tell you what to think — we'll teach you how to think. You'll learn how to gather information, analyze and synthesize. Don't worry about the "gathering"... that's the easy part. We have technicians, information specialists, and trainers to help you find the information you need. Pearson Library provides access to scholarly books, journals, ebooks, and databases of full text articles from scholarly journals. To begin using these materials, visit the library web page <http://www.callutheran.edu/iss/research/>. Librarians are available to assist you at the Thousand Oaks campus or via Meebo chat on the Library's home page or emailing [CLULibrary@callutheran.edu](mailto:CLULibrary@callutheran.edu). You may contact the library at (805) 493.3250. If you attend classes at one of CLU's satellite locations, see <http://www.callutheran.edu/iss/research/satellite.php> for the full range of services provided.

**CLU Writing Center**

Experienced Writing Center tutors help CLU's undergraduate and graduate students with their writing projects: reading freewrites to find the best ideas; refining thesis statements; showing students how to structure paragraphs; and using specific exercises to improve sentence syntax. They work with whole classes as well as with individual students on the style guidelines required for papers in the various disciplines.

All enrolled CLU students are invited to make use of our services. For additional information, please visit [http://www.callutheran.edu/writing\\_center/](http://www.callutheran.edu/writing_center/), call (805) 493-3257, [book online at GenBook](#), or stop by the Writing Center (The Darling Collaboration Suite in the library) to schedule an appointment.

### ADEP DROP DATES

December 10, Monday: Last day to add; last day to drop (without a “W”) Last day to drop without financial penalty (100% tuition charge for classes dropped after this date)

January 21, Monday: Last day to withdraw without academic penalty. Last day to remove incompletes from fall term.

**Number of Hours Outside of Class:** You will spend on average 100 “50-minute” hours of homework for the term, or 9 hours of homework per week, to meet our Carnegie Instructional Hours requirements.

### Typical Student Workload for this 4-credit course (50-minute hour):

Activity	Instructor-Led Hours		Homework Hours		Remarks
	Weekly	Course	Weekly	Course	
Readings of required material (instructor notes and on-line resources)			3 hr 40 min	40	Over 11 weeks, uneven distribution
Weekly Classes	3 hr. 20 min.	36 hrs. 40 min.			Includes final exam
Mid-term Prep				8	Average, varies by student
Final Project				40	Average, varies by student
Final Exam Prep				12	Average, varies by student
<b>Total</b>		<b>50</b>		<b>100</b>	