

California Lutheran University

Bachelor's Degree for Professionals

COURSE SYLLABUS

Visual Programming

CSC 300

Winter 2016

PROFESSOR:	Mr. John Dillon
CLASSROOM:	SW-111
TIME:	Tue 6:00 – 9:30 PM
OFFICE HOURS:	Tue 5:00 – 6:00 when requested (D21)
CONTACT INFORMATION:	email: jpdillon@callutheran.edu
TEXTBOOK:	Murach's Visual Basic 2012 by Anne Boehm published by Murach ISBN 978-1-890774-73-8

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.)

IMPORTANT: 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

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

Homework is due at the beginning of the specified class period unless otherwise specified. *Homework will NOT be accepted if more than one week late* without prior special arrangement. 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:

		B+	<90 - 87	C+	<80 - 77	D+	<70 - 67		
A	100-97	B	<87 - 84	C	<77 - 74	D	<67 - 64		
A-	<97 - 90	B-	<84 - 80	C-	<74 - 70	D-	<64 - 60		
						F	<60		

Your course grade will be determined as follows:

Homework	20%
Project	25%
Midterm(s) and quizzes	20%
Final Exam	25%
Class participation	10%

Tentative Schedule (of necessity, some topics will overlap with others)

Week	Subjects	Homework Due
1	Visual Basic as a programming language – just one of many! Visual Basic .NET 2012 The .NET Framework Developing a simple one-form application Using the debugger	
2	Toolbox controls Menus and the MenuStrip 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 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	Graphics and drawing Timers and simple animation	Homework 7
10	Project Presentations If there's time: Data integration, Datagrids, etc	Homework 8
11	Final	

ATTENDANCE POLICY

You are strongly encouraged to attend all classes. If you must miss a class, please let me know as soon as possible. If you miss more than two meetings, your grade may be reduced by two “ticks,” (e.g., from a B+ to a B-) especially if you don’t coordinate your absences with me ahead of time.

Professionals’ DROP DATES

December 7, 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 19, Tuesday: Last day to withdraw without academic penalty. Last day to remove incompletes from fall term.

Number of Hours Outside of Class:

The expectation is that a 4-credit course will meet for 50 hours of instructional time and will have about 100 hours of out-of-class work (homework).

- As our 4-credit courses meet for about 36-37 hours in-person, the remaining 13-14 hours of instructional time need to be handled via online instructions (flipped classes, discussion boards, etc.).
- There should be approximately 9 hours of homework per week (of course this may vary depending on the week)

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

Instructional Hours Chart**

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
Total		50		100	

** In this chart the Carnegie Instructional Hours have already been converted to traditional clock hours; these are based on a 60-minute clock hour.

Course Evaluations Statement:

All course evaluations are 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>

Disability 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 Disability Support Services Coordinator, Wendy Jimenez, for the facilitation and verification of need. The Disability Support Services Coordinator is located in the Center for Student Success Office at 3259 Pioneer Street, and can be contacted by calling 805.493.3878 or emailing wjimene@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 Cal Lutheran'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 dishonesty 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.

Standards of Student Conduct Statements:

- [Student Life Handbook](#)
- [Academic Honesty Statement](#)

University Harassment Policy

Be civil to each other, both on- and offline. For information on the University's **student harassment policy and rights, please go to the following link:**

[Student Life Handbook](#)

Sexual Misconduct

California Lutheran University does not tolerate any degree of sexual misconduct on or off-campus. We encourage you to report if you know of, or have been the victim of, sexual harassment, misconduct, and/or assault. If you report this to a faculty member, she or he must notify Cal Lutheran's Title IX Coordinator about the basic facts of the incident. More information about your options for reporting can be found at: <http://www.callutheran.edu/title-ix/>

Pearson Library

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/library>

There are many ways to contact Pearson Library for research assistance, no matter where you are!

- Email Yvonne Wilber (Professionals liaison) at ywilber@callutheran.edu
- General Library email: CLUlibrary@callutheran.edu
- Library main phone: 805.493.3250

- Text us your question: 805.493.3867
- Get more help at: <http://www.callutheran.edu/library/help/>

CLU Writing Center

The Writing Center provides 1:1 writing consultations, in-person and online, with trained undergraduate and graduate writing consultants. We welcome all writing-related projects at any stage of the writing process across the diverse disciplines of study at Cal Lutheran. The Writing Center also hosts writing workshops, provides in-class visits, facilitates writing groups, and offers a writer's studio option for longer, sustained projects. Services suit writers of all levels, including traditional undergraduates, graduate students from all fields, all English language learners, and accomplished scholars alike. All members of the Cal Lutheran community with an @callutheran.edu email address are welcome to make use of our services. For more information, please visit at www.callutheran.edu/writing_center or call 805.493.3257. Please schedule appointments online through MyCLU Blackboard with the yellow "The Writing Center" icon in "Tools," or stop by The Writing Center itself, located in the Darling Collaboration Suite of Pearson Library.

Veterans Resources

If you are a veteran, military member, or a family member of a veteran or military member, please refer to Cal Lutheran's Veterans Resources webpage for important information: <http://www.callutheran.edu/veterans/> Also, if you are a veteran receiving benefits and you are struggling in a class, you most likely qualify for free tutoring. Please contact the Veterans Coordinator, Jenn Zimmerman, veterans@callutheran.edu or 805.493.3648, for more information.

Help Desk

Students may contact the Help Desk about telephone, network, wireless network, software questions password problems, hardware problems, and general consultation (i.e. you cannot log into your MyCLU portal, or you are having problems with Blackboard). Please click on the following link for more information

http://www.callutheran.edu/iss/technology_services/helpdesk.php or call: 805.493.3698

Final Note

This syllabus is subject to change. Every effort will be made to alert students to changes that occur in a timely manner.