SYLLABUS
COMP 105BAS   Intro to Programming in Visual Basic – Lab   Spring 2019

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Course Web Page: http://www.drjeffsoftware.com/classroom.html
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Office Hours: In Lab, after class

Pre-requisites
C or better in COMP 101, 110 or 106.

Course Description
Solving problems via algorithms expressed as structured computer programs written in the language *Visual Basic* (VB). VB is Microsoft's Object-Oriented, event-driven extension to the Basic language. We will focus on the *VB.NET* version of VB. We will use Microsoft's *Visual Studio* as our "IDE" (Integrated Development Environment – basic tool set). There will be some comparisons made to other important application languages such as Java, C and C++.

Students will be performing a series of lab programs written in *VB.NET* using *Visual Studio*. A few of those lab programs will be the same ones assigned for my COMP110 course (Java), and some will be business oriented – such as loan amortization, databases, stock market. Unlike for my COMP110 course, there will not be term projects (since this course is only 1 unit).

Textbook/Slides
There is no textbook for this course. PowerPoint slides will be made available for download (as PDF files, so need to buy or install PowerPoint itself). Additionally, on occasion, a few slides will be emailed to the class.

VB Versions and Java
The CSUN CS Department has made a policy decision to use the Java language for lower division courses such as COMP110, where Java language details are presented. While Basic was created in the early 1960s as a simple to write language, an Object-Oriented, event-driven extension was created by Microsoft in 1991, called *Visual Basic,* which added a drag-and-drop design model (hence "visual"). This language persisted through version 6 in 1998, known as "VB6", which is still in use, but has not been supported by Microsoft since 2008. Microsoft also introduced a version of VB6 for writing macros in Office applications, called "VBA" for VB Applications.

Software Tools – VB.NET
In 2002, Microsoft launched their ".NET" platform for Windows, including their *Visual Studio* "IDE" with compiler support for a new version of "VB" called *VB.NET. Visual Studio* (VS) will be pre-installed on the lab computers for student use. Students will use their CSUN accounts to login to the lab computers.

Students may also use their own PCs, in which case, they will want to install the same free version of VS on their Windows PCs or Macs. (Note, VS is now also available for Macs in the latest 2017 version, but you may find it doesn't work so well on MacOS. In the past, some students loaded a Windows VM onto their Macs and used the Windows version.)

Note: the free version we will use is called *Visual Studio Community 2017* (although the 2015 version is also acceptable).

The software can be found here:
https://www.visualstudio.com/vs/community/

Design Pattern
VB.NET is best utilized employing the modern "design pattern" called "MVC": **Model-View-Controller**. I will enforce its use via the structure of our lab programs. Note that the "View" is a graphic design window with drag-and-drop elements used to design the overall user interface. The "Controller" is the collection of "event handler" subroutines that respond to user events like clicks. The "Model" is all the rest of the program needed to make the application work properly and fulfill its requirements.

Computer Accounts
Every student registered for the course has a networked account that can be used on all CS Department computers. Your account (user id and password) is the same as the one issued by the University. The instructor does not have sysadmin authority over student accounts. For problems logging in, see the CECS Information Services office in Room JD 1112, extension 3919.

Exams
There will be a Midterm and a Final Exam. These exams will be multiple choice entered on Scantron forms, plus the final will add an additional section for writing code segments.

Assignments
For programming assignments, there will be about 6-7 "Labs" (subject to change). The Labs will be carefully selected to integrate the current lecture material, and lead the student to a mastery of traditional and fundamental programming techniques, areas and algorithms. Some of the labs will be multi-part, so as to build up more complexity as we go.

Lab Form

Submissions of Labs will use a provided "Lab Form" (Word doc) for documentation, including a source code listing. All assignments are to be submitted as files (Word .doc or .pdf) attached to emails sent to this instructor directly (using my csun.edu address above).

Late Submission Policy

All assignments will have a due date. You will have a one week grace period. After that, late assignments become "past due" and are assessed a "late penalty" of 10% per week – for 2 more weeks. No assignments will be accepted after that final past due period. Finally, all remaining assignments (if any) must be submitted by the last day of class (regular classes, not the final exam week). No assignments will be accepted after the last day of class.

Lecture Material

All lectures will be delivered via PowerPoint slides (as PDF files), combined with live programming on Visual Studio. All slide sets will be updated and posted in PDF format to the class web page, with occasional new slides also sent via email. However, it is recommended that for the best level of preparation, you should attend lectures and participate in discussions, rather than simply reading the lecture slides on your own. There will also be a limited amount of hand-drawn notes on the board, for which each student is responsible for taking notes.

Lab

Since this course is entirely described as a "Lab", we will focus more on "lab" rather than the usual "lecture" sessions. The lab sessions will mostly involve the instructor going over the assignments, then running some example code live. Learning to use the *Visual Studio* IDE is an important part of the lab and the course. During the lab sessions, students may work on their assignments, and may ask for help from the instructor or any in-class tutor, or any other students. It will usually be necessary to continue to work on your programming assignments on your own time outside of your official lab time.

Save Your Work

Work done in the lab can be saved to your personal directory on the CECS file server (the "Z drive"). Do not store anything of importance on the hard drive of the local machine, since the machines can be reformatted at any time without prior notification. In addition to Z drive storage, you can use a USB flash drive to store backup copies of work performed in the lab, or you can send an email to yourself with programming source code as an attachment.

Tutors

The School (CECS) provides a group of tutors available M-F in the designated tutoring room in Jacaranda Hall. Students will be expected to make use of this resource.

Grading

You will receive **Plus/Minus** grading, as shown. The exams and Labs will be weighted as shown.

Grade	Pct	Interpret
A+	98	
A	92	VERY good
A-	90	
B+	88	
B	82	PRETTY good
B-	80	
C+	78	
C	72	BARELY good
C-	70	
D+	68	
D	62	substandard
D-	60	
F	<60	failed

Category	Weight	
Labs	70	Programming 70
Midterm	10	Testing 30
Final	20	

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Attendance

For at least the first several weeks, attendance will be closely monitored. Frequent unexcused absences may result in a grade penalty. After the first few weeks of the semester, attendance will not be monitored as closely, but note that the scheduled lab time is the most appropriate time to ask questions and get help on your assignments. I am not willing to spend an unreasonable amount of time outside of class (including excessive use of email) to explain class material to anyone who is not attending the lab. In other words, you are expected to participate in lab discussions by attending class, and get programming help on your assignments in person by attending the labs. Students are welcome to bring personal laptops with a wireless connection to the lab.

Personal Behavior in the Lab
You are expected to arrive to the labs on time, and to wait until dismissed before leaving. You are expected to be polite, pay attention, and participate in discussions: no web surfing, no private conversations, no cell phone interruptions, no sleeping/snoring, etc. You may quietly excuse yourself for bathroom breaks, to take important phone calls, and to address other urgent personal business, without asking for permission, but keep interruptions to a minimum. During labs, you are expected to keep personal web surfing to a minimum (quickly check your email then get to work). You may not play music or otherwise disturb other students while in the lab. If you finish your lab work early, you may remain in the lab and work quietly. You may be asked to leave after you finish your work if your personal computer usage is disruptive to other students. If you're ahead of the rest of the class and finish your work early, kindly consider looking around and finding someone who could use your help. You may not invite friends who are not enrolled in the course to join you in the lab to "just hang out".

Plagiarism and Academic Honesty
Academic honesty is expected from all students taking the course. All work that a student submits for course credit must be performed by the student who submits it. Use of for-pay programming services such as RentACoder for programming projects for course credit, either as a buyer or a seller, is not permitted, and is considered a serious offense. Exams must be taken according to parameters established by the instructor at the start of the exam. In general terms, students are prohibited from all communication, both verbal and electronic, with anyone except the instructor during an exam. Notes and other reference aids may or may not be permitted, instructor will specify what resources are allowed, if any, when exam is announced. For programming projects, you may discuss coding details with other students, but you cannot copy and paste large chunks of code from one student's work and then submit it as your own. Violations of this policy can result in a failing grade for the project or exam in question, and depending on the severity of the violation, may result in a failing grade for the course, as well as the violation being reported to the Dean of Academic Affairs. Students who repeatedly violate the policy across multiple courses may be suspended and even expelled from the University.