COURSE SYLLABUS (Distance Learning Edition) Computer Programming 1: Visual Basic and C++

Tamalpais Union High School District Redwood High School Larkspur, California August 19, 2020

Instructor / Classroom Info

Instructor: Dave Goldsmith (dave@redwood.org and DaveGoldsmith.com)
Lab 279 (Windows 10 Professional Computer Lab) and Office 277 (945-3639)

Online Learning Management System: Canvas

Course Objective

This one-semester course is the first in a series of computer programming courses. In this class you will learn how to code (design and write) computer programs (applications/software) using two separate programming languages: Microsoft Visual BASIC (Beginner's All-purpose Symbolic Instruction Code) and Microsoft C++. In Programming 2, 3, 4, 5, 6, and Advanced Placement, you will have the opportunity to continue working with these and other computer languages. In addition to learning the syntax of the languages and how to write programs to control what computers do, you will also learn good programming techniques and coding styles. Logic and problem-solving skills will be emphasized, as the computer programming skills learned in this course are transferable to all programming languages and computer platforms. As well as working individually, you may also have the opportunity to work in small groups on some larger projects. In addition, at various times during the semester you may be exposed to the Java programming language in the form of Minecraft plugins.

Required Course Materials

Notebook (with lined paper), pencils/pens/erasers

Note: There is no required textbook for this course, although numerous online materials will be used

Online Class Rules and Procedures

Maintain a reliable and sufficiently speedy Internet connection. (See note below.)

Use a desktop or laptop computer (not a phone or tablet) to connect to our online classes. (See note below.)

Make sure your computer camera is working and turned on at all times, except when told otherwise by the instructor. (See note below.)

Make sure your computer microphone is working at all times and (possibly) muted when you are not speaking. (See note below.)

Use headphones or earbuds, instead of speakers, if audio echo/feedback is a problem. (See note below.)

Your display name must consist of only your first and last name.

Do not sit or lie on a bed.

Wear school-appropriate clothes. No pajamas, hats, caps, hoods, or dark glasses.

Do not use a virtual background, and make sure everything visible through your camera is appropriate for an online class.

Be in a quiet location that will remain free of disruptions and distractions.

Phones, watches, and all other electronics must be nowhere near you.

Do not eat, chew gum, or listen to music.

Due to privacy and legal issues, you should never record any of our online classes.

Unless given permission by the instructor, do not use the live online chat system.

Share your screen only with instructor permission, and make sure everything you display is appropriate and directly related to our class.

Always use a gray pencil or blue/black ink when taking paper quizzes/tests.

Note: If any of these arrangements are a problem, let me know right away so that we can discuss your situation and figure out a way to resolve the problem.

Tests and Quizzes

At least one comprehensive test may be given during the semester. Tests will be announced at least three days in advance. You will usually be given one entire class period to complete each test. A quiz will usually be given every two to three weeks. You will generally be given at least 15 minutes to complete each quiz. Quizzes may not always be announced in advance and may not always be graded. Graded quizzes and tests may count for any number of points and/or any percentage of your overall course grade. Unless told otherwise, you will not be permitted to use any textbooks, notes, or other materials during assessments.

Assignments/Projects

Throughout the semester you will be given many assignments and projects. These almost always will be computer programs to be completed individually. A few of these programs may be started and finished within a single class period, but most of them will take several days or weeks to complete. This coding can sometimes be accomplished solely during the online class periods, but depending on circumstances, additional time outside of class may be required.

Homework

Homework will rarely be assigned. You may find, however, that you need to spend extensive time outside of the online class periods working on your assigned computer programs or practicing the skills and techniques covered in this course. Unless told otherwise, assigned homework will be due by the end of the day of the next class period.

Late Assignments

For each assignment or group of assignments, a specific due date and time will be given. Computer programs that are not properly and completely submitted by the day/time that they are due will still be accepted, but possibly for reduced credit.

Absences and Make-up Work

Unlike last spring, the state is now requiring that accurate attendance be taken every day for all online classes. This will be done via eSchoolPlus. You are expected to be present for this online class every day. If you are absent from the class on a day that an assignment is due, you are expected to turn in the assignment by the end of the next calendar (not class) day. (You must also leave a note when you upload the assignment explaining why it is late.) Work not turned in at that time will still be accepted, but possibly for reduced credit. If you are absent for an extended period of time, upon your return to class you should talk with me so that we can come up with specific days by which missed work is to be turned in. If you miss a test or a quiz, upon your return to class you should talk with me to arrange a specific time to make up the assessment (most likely the next available "Mandatory Support" period). Make-up tests/quizzes may be different from the originals. It is your responsibility to see me about missed assignments and assessments. If you fail to see me immediately upon your return, you may not be allowed to make up missed work.

Tardies and Absences

To avoid spending class time taking attendance, I will generally try to take roll during the online "passing period" and then click the "Save" button in eSchoolPlus right at the start time of each class period. This means that you must join our online classes before the start time of each period; if you have not joined an online class by the start time, you may be marked absent. However, if you are late to class, but arrive within the first ten minutes of the period, and notify me immediately upon your arrival, and then remind me at the end of the class period (or when I have a free moment), your absence will be changed to a tardy. Keep in mind that your overall course grade may be affected by excessive tardies and absences. Also, we've been told that excessive absences may trigger a response from the Redwood administration.

Extra Credit Work

Due to numerous students focusing on extra credit programs and using them to compensate for a lack of effort and poor work and time management skills with the regular assignments, I have eliminated independent extra credit projects. Therefore, to earn a high grade in this course, you must complete all of the assignments fully and correctly, and you must properly submit them on time. In addition, you will need to earn high scores on all assessments. Depending on circumstances, I may provide some extra credit opportunities in the form of extensions of selected regular or homework assignments.

Cheating

If you cheat on a test, quiz, or assignment, you will receive zero points for that work, an administrative disciplinary referral will be issued, and your parents/guardians will be notified. If you engage in (non-cheating) inappropriate conduct during a test or quiz, you may receive reduced credit or no credit for that assessment. In both cases (cheating and misbehaving), additional disciplinary action may also be taken, which can include the loss of even more points and/or the lowering of your overall course grade. Note that submitting a coding project that is not entirely your own is considered cheating. If you are ever in doubt about whether a particular action is considered cheating, check with me first. If you need extra help, see me in advance of any upcoming quiz, test, or assignment due date. For additional information, see the separate distance learning "No-Cheating" contract that you and a parent/guardian are required to sign.

Extra Help

I will be available to provide extra help for students during the 75-minute "Mandatory Support" periods on Tuesdays and Thursdays. During those times I will be online so that you can share your computer screen with me. Note that those two periods are the <u>only</u> times that I am guaranteed to be available for extra support, so unless I indicate otherwise, you should assume that I will <u>not</u> be available to provide extra help on any other days or at any other times. You can, of course, always email me (dave@redwood.org) for additional support, but for most coding-related questions you will need to wait until one of the above time periods so that we can both be online and I can view your screen and help you edit your computer code. Remember, if you are having difficulty understanding a concept, it is <u>your</u> responsibility to seek help.

Grading Policy

With the exception of grade modifications due to conduct and participation, your course grade is based on a point system, which is cumulative for the entire semester. Marking period grades are calculated solely to be available for progress reports; these grades are not averaged. The total number of points for each semester and the percentage value of each test, quiz, and assignment will depend on how many assessments and assignments are given, as well as their individual point values. Those point values will usually be provided online, often before the date of the assessment or the start date of the assignment.

Note that marking period and semester grades are the only overall grades that I am required to produce. At my discretion, I may choose to calculate and publish your current course grade at other times during the semester. Do not ask me to confirm any grade calculations that you make on your own, or what your current grade is in the course. I will not know, and I do not calculate grades on demand. Also, do not ask what score you need to earn on an assessment or assignment in order to obtain a specific overall grade, or what your overall grade will be if you earn a certain score. I will not know the answers to those questions, and I will not make predictions.

Letter grades will generally be assigned as follows:

Below 100% down to 95% \rightarrow "A" Below 90% down to 80% \rightarrow "B" range Below 70% down to 60% \rightarrow "D" range Below 95% down to 90% \rightarrow "A-" Below 80% down to 70% \rightarrow "C" range Below 60% \rightarrow "F" (failing)

Course Content

The following are general topics that may be covered in this one-semester course:

Programming Language Syntax Sorting Algorithms Variable Initialization Input & Output Programming Concepts & Style Random Numbers Modular Programming Arrays Error Handling Decision Structures Loop structures Graphics Data Storage **Functions** Data Types Subprograms Numeric & String Variables Objects & Properties Global & Local Variables Classes

<u>Notes</u>

I reserve the right to amend the policies, rules, and procedures outlined in this syllabus at any time, without any advance notice. I also reserve the right to change, at any time, the point value of any test, quiz, or assignment. In addition, at my discretion, and without any advance notice, I reserve the right to raise or lower your overall course grade based on your online class conduct and participation.

Instructor: Dave Goldsmith	Course: Computer Programming 1	Date: August 19, 2020
I have read the preceding rules, procedures,	, and policies contained in this course syllabus and understand and will abide	by them.
Student Signature	Parent/Guardian Signature	
Student Name (please PRINT):		