De Anza College **Winter 2016**

CIS 22A-04Y - Beginning Programming Methodologies in C++

Instructor	Manish Goel
Class Hours	MW: 1:30 pm – 3:20 pm, Room AT312 T: 5:30 pm – 6:15 pm ONLINE
Office Hours	MW: 3:30 pm – 5:30 pm or by appointment
Office Location	Room F-51L in Bldg F5, though I'm usually in the ATC Computer Lab
Phone	(408) 864-8996 – turnaround time can be 24 hours
Email	goelmanish@fhda.edu – this is the best way to reach me
Text	*Starting Out with C++: From Control Structures through Objects* 8th edition, by Gaddis ISBN: 0-133-77877-0
Class website	Please log into Catalyst
Course Description	An introduction to computer programming. Its primary objective is to teach problem solving using the C++ programming language. Emphasis will be placed on structured procedural programming with an introduction to object-oriented programming.
Prerequisites	Advisory: English Writing 211 and Reading 211 (or Language Arts 211), or English as a Second Language 272 and 273; Mathematics 114 or equivalent. (Students may receive credit for either {CIS 22A and 22B} or {CIS 27}, but not both.)
Student Learning Outcomes	Upon the completion of this course, students will be able to: • Design solutions for introductory level problems using appropriate design methodology incorporating elementary programming constructs • Create algorithms, code, document, debug, and test introductory level C++ programs • Read, analyze and explain introductory level C++ programs
Attendance	Any student who is a No-Show on first day of class will be dropped. After the first class, it is *your responsibility to drop the class before the last day to drop.* Otherwise, you will receive an appropriate grade at the end of the quarter. This hybrid course has 4 lecture / lab hours on campus in addition to online reading and assignments. Regular and punctual attendance is expected during the quarter. Lectures will be the main source of information.
Class Decorum	In class, you are expected to pay attention, participate, not conduct personal conversations, and use the computer for class work only. Disruptive behavior is not tolerated, and any student with excessive disruptive behavior will be asked to leave and administrative follow-up may result. On the other hand, worthwhile contribution and regular attendance can positively affect your grade.
Scholarly Conduct	Discussion and exchange of ideas on lab assignments are strongly encouraged. However, each person is expected to complete his/her own computer work. **Identical solutions will be given a zero grade to all parties. DO NOT SHARE EITHER SOFT OR HARD COPY OF YOUR CODE WITH ANYONE. Copying or cheating during an exam will result in a zero being assigned to the test grade for both parties and may result in a failing grade. ANY SUCH ACTIVITY WILL BE REPORTED FOR DISCIPLINARY ACTION.**

Lab Assignments There will be up to 10 lab assignments for a total of 100 points:

- Labs worth more than 10 points may have one or more parts.
- All labs have to be turned in as a soft copy via Catalyst by their due date.
- Partial credit will be given for incomplete labs based on corresponding grading rubrics.
- Labs turned in after the due date will receive a 20% *per calendar day* penalty.
- Labs turned in more than 5 days after the due date will not be graded.
- All labs will build on the prior ones, so missing any labs could be hard to make up.

Exams There will be 2 short quizzes, 1 midterm and 1 final.

- All exams are open book, open notes, no electronic devices.
- The quizzes will be multiple choice, fill in the blank questions or code correction questions.
- Midterm and final will include programming questions for which code submission will be required similar to lab assignments.
- You must pass the final exam in order to pass the class.
- Make up for the midterm will be allowed only with proof of emergency reasons or prior approval. Make up exam will be given no later than one week after the mid-term, will be administered after a class session and will have a 25% penalty.
- Final exam must be taken only during the scheduled time – there will be no make up.

Code Lab CodeLab is an online learning tool and its use is worth 60 points. The questions will be assigned and required to be completed in class. Late submission of solutions will be allowed of up to 24 hours and will incur a 50% penalty.

Extra Credit There will be other opportunities to earn extra credit – these will be determined later. You must be present in class to earn the extra credit

Grading Grading is based on the percentage of the total points obtained as below. All grades will be reflected in Catalyst. There will be no curve.

Lab assignments:	100 points (10x10 point if 10 are assigned)
Quizzes:	40 points (2x20 points)
Codelab:	60 points
Midterm:	50 points
Final:	50 points
Total:	300 points

The passing grade at De Anza is a C or higher – for students taking this course for a Pass/No-Pass.

A+: 97-100%	B+: 87-89%	C+: 77-79%	D+: 67-69%	
A : 93-96%	B : 83-86%	C : 70-76%	D : 63-66%	
A- : 90-92%	B- : 80-82%		D- : 60-62%	F : 0-59%

Lab Submission Format

- IMPORTANT - All labs MUST WORK on Microsoft Visual Studio 2013 because they will be graded on MSVC13. If you use Mac or Linux machines or any other Windows compiler, please ensure your labs compile and run on MSVC13 in the ATC lab computers. Code that doesn't run on MSVC13 will earn a 25% penalty.

- Each lab project should be named **"Lab_nn_yourfullname"**. The CPP file inside the project should be name**d "Lab_nn_yourfullname.cpp"**.

- Each assignment must begin with a documentation block with the following information – failure to include the header name block will earn a 10% penalty:

```
// CIS 22A
// Lab nn: One line description of the lab
// Name:_____
```

- Assignments will be graded for Correctness, Structure, Style, Clarity and Documentation.

- All labs will require screen shots of your program output. The screen shots should be taken such that the output is clearly readable – remember the grading will take place on a different machine so zoom screen shots to improve readability before submitting.

- Some labs will require file output. Most likely, the format of the file output will be similar to the screen output but will be specified along with the lab.

- All labs should have minimum documentation as follows:
  1. Name block at the top of the code file.
  2. Pseudocode – right after the name block, and at other necessary places in your code.
  3. Comments in-line with the Program listing as necessary to make your code understandable.
  4. Name block in your Program Output.

- Remember to adequately test your program. When test data is specified, output based on the test data is <u>required</u>.

- Remember to collect all necessary files of your work – *it is your responsibility to ensure I have complete assignments*. At a minimum, your output will consist of:
  1. Your code file as a *.cpp file.
  2. Your screen output as a JPG or PNG – it could be one or more files.
  3. If any flowchart is required, it should be in a PDF format with clear readability. For flowcharts, hand-drawn diagrams scanned as PDF files or PDF exports from any drawing application used will be acceptable.
  4. If any file output is required, it should be in a *.txt format.
  5. Zip all your files into a single compressed folder of type *.zip – your zip file should be named **"Lab_nn_yourfullname.zip"**.
  6. Only include the required files, do not create any sub-folders inside the zip file – this is especially important for MAC users.
  7. Upload your zip file to the Catalyst link for the corresponding lab only – do not email them to me.
  8. Not following all of the above or submitting labs in any other zip format (*.gz, *.tar, *.7z etc.) will earn a 10% penalty.