CIS 22A - Beginning Programming Methodologies in C++

Instructor: Manish Goel
Class Hours: TTh: 6:00 pm – 7:50 pm, AT312
Th: 4:45 pm – 6:00 pm ONLINE
Office Hours: MTWTh: 3:30 pm – 4:30 pm or by appointment
Phone: (408) 799-9170 – 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

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 10 lab assignments – each will be 10 points and 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.
- Labs turned in after the due date will receive a 20% per weekday penalty.
- 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.
- 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 at least 30 points.

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:
- Lab assignments: 100 points (10x10 points)
- Quizzes: 20 points (2x10 points)
- Codelab: 30 points
- Midterm: 50 points
- Final: 50 points
- Total: 250 points

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Lab Submission Format

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

  ```
  // CIS 22A
  // Lab N: One line description of the lab
  // Name: _________________________________
  ```

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

- The order of the lab documentation is as followed:
  1. **Program Listing**
  2. **Program Output**. You are expected to adequately test your program. When test data is specified, it is required.

- Remember to collect all necessary files of your work – it is your responsibility to ensure I have complete assignments.