# CIS 22A: Beginning Programming Methodologies in C++

Course Info:          CIS-022A-44Z   CRM: 42528
Quarter/Year          Spring 2022
Lecture:              06:00PM - 06:50PM     T-Th
https://fhda-edu.zoom.us/j/92208122298

Online Office Hours     07:00PM - 07:50PM     T
https://fhda-edu.zoom.us/j/95324918894

Instructor:           **Hoang M. Nguyen**
E-mail:              nguyenhoangm@fhda.edu
Class website:       https://deanza.instructure.com/
Prerequisites:       None
Advisory:           EWRT 211 and READ 211,
                      or ESL 272 and 273; MATH 114 or equivalent.

Course Description:
The fundamental constructs of programming and introduces the concept of object-oriented programming is covered in the course. 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.
https://www.deanza.edu/catalog/courses/outline.html?cid=CIS22A

Student Learning Outcomes:    Upon completion of the class, the 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.

Required Textbook:     **CIS 22A: Beginning Programming Methodologies in C++**
                      zyBook ISBN: 978-1-394-10219-8
                      Note: it is integrated and available inside Canvas module.

Grading Policy:       • Final Exam:              25%
                    • Midterm:                20%
                    • Programs:              45%
                    • Exercises:             10%

Grade's Scale:

| A+ | A | A- | B+ | B | B- | C+ | C | D | F |
|---|---|---|---|---|---|---|---|---|---|
| 99+% | 92-98% | 90-91% | 88-89% | 82-87% | 80-81% | 78-79% | 70-78% | 60-69% | <60% |

Important notes:
- The final exam will be comprehensive with the emphasis on topics covered after the midterm exam.
- Programming assignments will be graded on whether they work as required, documentation, program structure, and the completeness of testing.
- Students are required to attend the online lecture and encouraged to make use of office hours
- All assignments and class materials will be posted online at the school's Canvas website.

**Tentative Course Outline**

| Week | Topics (Chapters) | Work Due |
|---|---|---|
| 1 (4/7) | Introduction to C++ (Ch 1)<br>Variable / Assignments (Ch 2) | |
| 2 (4/12) | Branches (Ch 3)<br>Loops (Ch 4) | |
| 3 (4/19) | User-defined functions (Ch 5) | |
| 4 (4/26) | Arrays / Vectors (Ch 6) | |
| 5 (5/3) | Streams (Ch 9)<br>Review | **Pgm1 Due** |
| 6 (5/10) | **Midterm**<br>Objects and Classes (Ch 7) | |
| 7 (5/17) | Objects and Classes (Cont'd)<br>Pointers (Ch 8) | |
| 8 (5/24) | Pointers (Cont'd) | |
| 9 (5/31)<br>(6/2) | More on Class (Ch 7) | **Pgm2 Due** |
| 10 (6/7) | Selected Topics | |
| 11 (6/14) | Review | |
| 12 (6/21) | **Final Exam** | **Pgm3 Due** |

Important links:
- Resources On Campus:
    - Student Success Center (deanza.edu)
    - EOPS
    - Counseling
- Academic Integrity (deanza.edu)
- Mutual Respect Policy
- Emergency Funds Application (deanza.edu)
- Disability Support Programs and Services Division (deanza.edu)
- Academic calendar
- Final Exam Schedule (deanza.edu)