SYLLABUS
PART I
EDISON STATE COMMUNITY COLLEGE
CIS 223S C++ PROGRAMMING
3 CREDIT HOURS

COURSE DESCRIPTION
Introduction to structured programming using the C++ programming language. Topics include control flow, data types, functions, parameter passing, input/output streams, an introduction to object-oriented programming, pointers, dynamic memory management, and exception handling techniques. Prerequisite: CIS 221S or department approval. Lab Fee.

COURSE GOALS:
The student will:

Bloom's Level		Program Objectives
2	1. Execute the software development process to create a top-down design approach when writing C++ programs.	3, 4, 5, 7
3	2. Use C++ functions, procedures, and other features listed in the course topic outline.	3, 7
5	3. Use the features of object-oriented programming to design C++ programs using classes and objects.	3, 7
3	4. Use a team approach to solve a programming problem.	3, 6, 7
3	5. Apply appropriate documentation techniques within programs.	7
4	6. Analyze program code and implement debugging and exception handling techniques.	3, 7
2	7. Discuss the importance of ethics in the computer industry and the role they play in the field of software development.	1

CORE VALUES
The Core Values are a set of principles that guide Edison State Community College in creating its educational programs and environment. They will be reflected in every aspect of the College. Students' educational experiences will incorporate the Core Values at all levels, so that a student who completes a degree program at Edison State Community College will not only have been introduced to each value, but will have had them reinforced and refined at every opportunity.

TOPIC OUTLINE
1. Introduction to C++ Programming
2. Fundamentals of C++
3. Decision Structures
4. Chars and Strings
5. Loop Structures
6. Functions
7. Arrays
8. Multidimensional Arrays
9. Object-oriented Programming in C++
10. Pointers and Dynamic Memory Management
11. File Input and Output
12. Exception Handling