

CIS 255: C++ Object Oriented Programming

C++ is a widely used programming language for application development. In this course, the students learn a language that has many practical uses in the real world. The course introduces C++ syntax and functions not found in the traditional C. The fundamental concepts of the object-oriented paradigm are introduced, and object-oriented programming is stressed in place of traditional structured programming. Object arrays, pointers to objects, and linked lists of objects are the focus of the class. Prerequisite: CIS 155 or permission of the instructor. Three class hours a week. Instructional Support Fee applies. Gen. Ed. Competencies Met: Information Literacy.

Course Student Learning Outcomes

- 1. Create C++ programs that make use of C++ classes and reference variables.
- 2. Apply the concepts of inheritance and polymorphism.
- 3. Write and use virtual functions and overloaded operators.
- 4. Create C++ classes with appropriate sets of constructors and destructors.
- 5. Dynamically allocate and deallocate memory.
- 6. Apply function overloading and operator overloading in C++ programs.
- 7. Understand static data members and static member functions as well as templates and C++ standard library (STL).

Credits: 3

Program: Computer Information Systems

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