

# CIS 326 – Object-Oriented Programming I

## Course Description

Covers the traditional C language and object-oriented extensions that are found in the C++ language. Describes concepts of objects, encapsulation, data hiding, polymorphism, and inheritance as well as the C++ techniques that implement them.

## Instructional Materials

D’Orazio, T. (2004). *Object-oriented programming I & II: Third custom edition*. New York: McGraw-Hill.

## Course Learning Outcomes

1. Define the basic concepts in developing programs using the C++ Programming language. This knowledge will be demonstrated by the student by writing code for applications during examinations and laboratory work that demonstrate a basic competence in programming.
2. Write, debug, and document programs using the recommended object oriented approach.
3. Discuss the concepts related to C++ classes and demonstrate this knowledge by creating applications during examinations and laboratory work.
4. Explain the concepts related to the overriding, operator overloading and abstraction and demonstrate this knowledge by coding applications during examinations and laboratory work.
5. Identify the concepts related to inheritance and demonstrate this knowledge by coding applications during examinations and laboratory work.
6. List the concepts related to string processing and operator overloading and demonstrate this knowledge by coding applications during examinations and laboratory work.
7. Analyze the concepts related polymorphism and demonstrate this knowledge by coding applications during examinations and laboratory work.
8. Synthesize current information related to topics in this course using the APA format.