



CIS 123: Object-Oriented Concepts

This course is an introduction to the use of object-oriented concepts for software development. It prepares students for the CIS 157 Object-Oriented Java Programming course. The course concentrates on objects and discusses very little Java syntax. It discusses the object-oriented paradigm in detail with particular emphasis on classes, objects, and the use of objects in user applications and applets. The course introduces encapsulation, inheritance, arrays of objects, and polymorphism. Students learn how to design classes and display the interaction of objects in visual form using the Unified Modeling Language. The course introduces several concepts from procedural programming such as primitive data types, assignment, conditionals, and repetitive loops. Three lecture hours per week. Instructional Support Fee applies. Gen. Ed. Competencies Met: Critical Thinking and Information Literacy. 3 credits Fall

Course Student Learning Outcomes

1. Compare the object-oriented model to the procedural programming model.
 2. Become comfortable with the difference between a class and an object.
 3. Understand how actual arguments are passed to the formal parameters of methods.
 4. Learn how to design Java classes using UML.
5. Apply object oriented concepts in the design of a small application system.

Credits: 3

Program: Computer Information Systems