

## **OBJECT-ORIENTED FUNDAMENTALS v. 1.1**

### **Description:**

Learn what object-oriented programming is all about. If you are a C programmer who wants to move up to C++ this is the self-paced training course for you. DU's multimedia Object-Oriented Fundamentals course enables you to easily make the paradigm shift from procedural to object-oriented design. It will introduce you to the entire object skill set, from general concepts through analysis, design and implementation. The course includes QuickApp, a commercially available class library, that will assist you in the completion of the labs. This course assumes that you will be using Metrowerks CodeWarrior integrated development environment in the labs. A "lite" version of CodeWarrior is included with the course. Symantec's C++ integrated development environment will work with the labs as well but is not included. This course also includes a copy of the book *Learn C++ on the Macintosh* by Dave Mark. Approximately 40 hours of training.

### **Facts:**

Self-Paced  
Apple Developer Catalog P/N: R0560LL/B  
\$245.00

### **Target Audience:**

Any C programmer who wishes to learn general object oriented concepts, C++, or fundamental object-oriented design.

### **Prerequisites:**

You must be able to program a simple application in C on any platform.

### **Equipment:**

#### **Hardware:**

Macintosh CPU with at least a 68020 processor  
10MB of RAM  
10MB of hard disk space  
CD-ROM drive

#### **Software:**

System 7.1.2 or later

## **Course Outline:**

- I. Introduction
- II. Object-Oriented Analysis
  - A. Understanding the analysis process
  - B. Examining an Object in Memory
- III. Object-Oriented Design
  - A. Designing classes
  - B. Implementing classes and program objects
- IV. Designing Class Hierarchies
  - A. Creating derived classes
  - B. Polymorphism
  - C. Inheritance & class hierarchies
  - D. Implementing inheritance
- V. Designing for Modularity
  - A. Objects Using Other Objects
  - B. Information Hiding
  - C. Modularity
  - D. Implementing a Functional Group
  - E. Testing the Design
- VI. Using an Application Framework
  - A. Using MacBrowse
  - B. Exploring QuickApp
  - C. Using a Class Library