uCertify

Course Outline

Swift iOS for Beginners



28 Mar 2024

1. Course Objective
2. Pre-Assessment
3. Exercises, Quizzes, Flashcards & Glossary

   Number of Questions
4. Expert Instructor-Led Training
5. ADA Compliant & JAWS Compatible Platform
6. State of the Art Educator Tools
7. Award Winning Learning Platform (LMS)
8. Chapter & Lessons

   Syllabus

   Chapter 1: Hello iOS!

   Chapter 2: A Tour of Xcode and the iOS Simulator

   Chapter 3: Introducing Swift

   Chapter 4: Functions

   Chapter 5: Closures

   Chapter 6: Error Handling

   Chapter 7: Object-Oriented Programming with Swift

   Chapter 8: Supporting Multiple Device Types

   Chapter 9: Introduction to UIKit and Adaptive Layout

   Chapter 10: Introduction to Storyboards

   Chapter 11: Handling User Input

   Chapter 12: Alert Views and Action Sheets

   Chapter 13: Adding Images to Your View

   Chapter 14: Pickers

   Chapter 15: Navigation Controllers

   Chapter 16: Table Views

   Chapter 17: Collection Views

   Chapter 18: Tab Bars and Toolbars

Chapter 19: Creating Views That Scroll

Chapter 20: Popovers and Modal Views

Chapter 21: Touches and Gestures

Chapter 22: Property Lists

Chapter 23: Application Settings

Chapter 24: Introduction to iCloud Storage

Chapter 25: Introduction to CloudKit

Chapter 26: Introduction to Core Data

Chapter 27: Consuming RESTful JSON Web Services

Chapter 28: Social Media Integration

Chapter 29: Where Am I? Introducing Core Location

Chapter 30: Introduction to Map Kit

Chapter 31: Using the Camera and Photo Library

Chapter 32: Introduction to User Interface Testing

Chapter 33: Introduction to Test Driven Development

Chapter 34: Appendix A: Testing Your App on a Device

Chapter 35: Appendix B: Beta Testing with TestFlight

Chapter 36: Appendix C: App Store Distribution

Videos and How To

9. Practice Test

   Here's what you get

   Features

10. Post-Assessment

1. Course Objective

Enroll yourself in the Swift iOS for Beginners course to gain the skills and understanding required for iOS app development. The iOS development course covers topics such as test-driven development, and UI testing. The iOS app development course designed is for beginners with little experience who want to pursue a career in the exciting world of iOS development and but also for experienced Objective-C developers who want to learn the Swift programming language.

2. Pre-Assessment

Pre-Assessment lets you identify the areas for improvement before you start your prep. It determines what students know about a topic before it is taught and identifies areas for improvement with question assessment before beginning the course.

3. Quizzes

Quizzes test your knowledge on the topics of the exam when you go through the course material. There is no limit to the number of times you can attempt it.



4. flashcards

Flashcards are effective memory-aiding tools that help you learn complex topics easily. The flashcard will help you in memorizing definitions, terminologies, key concepts, and more. There is no limit to the number of times learners can attempt these. Flashcards help master the key concepts.



5. Glossary of terms

uCertify provides detailed explanations of concepts relevant to the course through Glossary. It contains a list of frequently used terminologies along with its detailed explanation. Glossary defines the key terms.



6. Expert Instructor-Led Training

uCertify uses the content from the finest publishers and only the IT industry's finest instructors. They have a minimum of 15 years real-world experience and are subject matter experts in their fields. Unlike a live class, you can study at your own pace. This creates a personal learning experience and gives you all the benefit of hands-on training with the flexibility of doing it around your schedule 24/7.

7. ADA Compliant & JAWS Compatible Platform

uCertify course and labs are ADA (Americans with Disability Act) compliant. It is now more accessible to students with features such as:

- Change the font, size, and color of the content of the course
- Text-to-speech, reads the text into spoken words
- Interactive videos, how-tos videos come with transcripts and voice-over
- Interactive transcripts, each word is clickable. Students can clip a specific part of the video by clicking on a word or a portion of the text.

JAWS (Job Access with Speech) is a computer screen reader program for Microsoft Windows that reads the screen either with a text-to-speech output or by a Refreshable Braille display. Student can easily navigate uCertify course using JAWS shortcut keys.

8. State of the Art Educator Tools

uCertify knows the importance of instructors and provide tools to help them do their job effectively. Instructors are able to clone and customize course. Do ability grouping. Create sections. Design grade scale and grade formula. Create and schedule assessments. Educators can also move a student from self-paced to mentor-guided to instructor-led mode in three clicks.

9. Award Winning Learning Platform (LMS)

uCertify has developed an award winning, highly interactive yet simple to use platform. The SIIA CODiE Awards is the only peer-reviewed program to showcase business and education technology's finest products and services. Since 1986, thousands of products, services and solutions have been recognized for achieving excellence. uCertify has won CODiE awards consecutively for last 7 years:

- **2014**
    1. Best Postsecondary Learning Solution

- **2015**
    1. Best Education Solution

2. Best Virtual Learning Solution
3. Best Student Assessment Solution
4. Best Postsecondary Learning Solution
5. Best Career and Workforce Readiness Solution
6. Best Instructional Solution in Other Curriculum Areas
7. Best Corporate Learning/Workforce Development Solution

- **2016**
    1. Best Virtual Learning Solution
    2. Best Education Cloud-based Solution
    3. Best College and Career Readiness Solution
    4. Best Corporate / Workforce Learning Solution
    5. Best Postsecondary Learning Content Solution
    6. Best Postsecondary LMS or Learning Platform
    7. Best Learning Relationship Management Solution

- **2017**
    1. Best Overall Education Solution
    2. Best Student Assessment Solution
    3. Best Corporate/Workforce Learning Solution
    4. Best Higher Education LMS or Learning Platform

- **2018**
    1. Best Higher Education LMS or Learning Platform
    2. Best Instructional Solution in Other Curriculum Areas
    3. Best Learning Relationship Management Solution

- **2019**
    1. Best Virtual Learning Solution
    2. Best Content Authoring Development or Curation Solution
    3. Best Higher Education Learning Management Solution (LMS)

- **2020**

1. Best College and Career Readiness Solution
2. Best Cross-Curricular Solution
3. Best Virtual Learning Solution

10. Chapter & Lessons

uCertify brings these textbooks to life. It is full of interactive activities that keeps the learner engaged. uCertify brings all available learning resources for a topic in one place so that the learner can efficiently learn without going to multiple places. Challenge questions are also embedded in the chapters so learners can attempt those while they are learning about that particular topic. This helps them grasp the concepts better because they can go over it again right away which improves learning.

Learners can do Flashcards, Exercises, Quizzes and Labs related to each chapter. At the end of every lesson, uCertify courses guide the learners on the path they should follow.

Syllabus

Chapter 1: Hello iOS!

- iOS Developer Essentials
- Try It

Chapter 2: A Tour of Xcode and the iOS Simulator

- The Welcome Screen
- Creating a New Project
- An Overview of the Xcode IDE
- Features of the iOS Simulator

- Try It

Chapter 3: Introducing Swift

- Introducing Xcode Playgrounds
- Constants and Variables
- Data Types
- Comments
- Strings
- Tuples
- Optionals
- Control Flow Statements
- Control Transfer Statements
- Try It

Chapter 4: Functions

- Declaring Functions
- Parameters and Return Values
- Try It

Chapter 5: Closures

- Function Types
- Closure Types
- Try It

Chapter 6: Error Handling

- The ErrorType Protocol
- Throwing and Catching Errors
- Try It

Chapter 7: Object-Oriented Programming with Swift

- Creating Classes with Swift
- Properties
- Methods
- Instantiating Objects
- Inheritance
- Computed Properties
- Enumerations

- Protocols
- Try It

Chapter 8: Supporting Multiple Device Types

- Device Differences
- The Universal XCode Template
- Try It

Chapter 9: Introduction to UIKit and Adaptive Layout

- Introducing the UIKit Framework
- Basic Constraints
- Previewing Your Layout
- Creating Outlets
- Creating Actions
- Try It

Chapter 10: Introduction to Storyboards

- Try It

Chapter 11: Handling User Input

- Text Fields
- Text Views
- Try It

Chapter 12: Alert Views and Action Sheets

- Alert Views
- Action Sheets
- Try It

Chapter 13: Adding Images to Your View

- The UIImage Class
- The UIImageView Class
- Try It

Chapter 14: Pickers

- Date Pickers
- Custom Pickers
- Try It

Chapter 15: Navigation Controllers

- Adding a Navigation Controller to a Storyboard
- The Navigation Controller Interface
- Try It

Chapter 16: Table Views

- Table View Appearance
- Creating a Table View with Interface Builder
- Try It

Chapter 17: Collection Views

- Creating a Collection View with Interface Builder
- Collection View Cells
- Collection View Delegate and Data Source
- Try It

Chapter 18: Tab Bars and Toolbars

- Creating a Tab Bar Controller
- Toolbars

- Try It

Chapter 19: Creating Views That Scroll

- The UIScrollView Class
- Scroll Views and Text Fields
- Try It

Chapter 20: Popovers and Modal Views

- Popovers
- Modal Views
- Try It

Chapter 21: Touches and Gestures

- Touch Events
- Gesture Recognizers
- Try It

Chapter 22: Property Lists

- Creating Property Lists

- Reading Property Lists
- Try It

Chapter 23: Application Settings

- Adding a Settings Bundle
- Reading Preferences with Code
- Try It

Chapter 24: Introduction to iCloud Storage

- Basic Concepts
- Preparing to Use the iCloud Storage APIs
- Checking for Service Availability
- Using iCloud Document Storage
- Try It

Chapter 25: Introduction to CloudKit

- Containers, Databases, and Records
- Development and Production Environments
- The CloudKit Dashboard

- Preparing to Use CloudKit
- Common Operations
- Try It

Chapter 26: Introduction to Core Data

- Basic Concepts
- Adding Core Data to a Project
- Instantiating Core Data Objects
- Writing Managed Objects
- Reading Managed Objects
- Try It

Chapter 27: Consuming RESTful JSON Web Services

- Types of Web Services
- JSON and NSJSONSerialization
- NSURLSession and Application Transport Security
- Try It

Chapter 28: Social Media Integration

- The Share Sheet
- Try It

Chapter 29: Where Am I? Introducing Core Location

- Permissions
- Accuracy
- Receiving Location Updates
- Handling Errors and Checking Hardware Availability
- Geocoding and Reverse Geocoding
- Obtaining Compass Headings
- Try It

Chapter 30: Introduction to Map Kit

- Adding Annotations
- Accessory Views
- Try It

Chapter 31: Using the Camera and Photo Library

- Selecting the Image Source

- Presenting the Image Picker
- Try It

Chapter 32: Introduction to User Interface Testing

- Adding Support for UI Testing to Your Project
- Anatomy of a Test Case
- New Classes for UI Testing
- Test Assertions
- UI Recording
- Waiting for Elements in a UI Test
- Try It

Chapter 33: Introduction to Test Driven Development

- Adding Support for Unit Testing to Your Project
- TDD Techniques
- Anatomy of a Test Case
- Test Assertions
- Try It

Chapter 34: Appendix A: Testing Your App on a Device

- Obtaining and Registering UDIDs
- Creating an App ID (Bundle Identifier)
- Creating a Development Certificate
- Creating a Provisioning Profile
- Configuring Your Project

Chapter 35: Appendix B: Beta Testing with TestFlight

- Preparing a Distribution Build for TestFlight
- Internal and External Testers

Chapter 36: Appendix C: App Store Distribution

- Creating an Application Profile
- Preparing and Uploading the Application Binary
- Submitting the App for Review

Videos and How To

uCertify course includes videos to help understand concepts. It also includes How Tos that help learners in accomplishing certain tasks.

33	05:20
VIDEOS	HOURS

11. Practice Test

Here's what you get

50	50
PRE-ASSESSMENTS QUESTIONS	POST-ASSESSMENTS QUESTIONS

Features

Each question comes with detailed remediation explaining not only why an answer option is correct but also why it is incorrect.

Unlimited Practice

Each test can be taken unlimited number of times until the learner feels they are prepared. Learner can review the test and read detailed remediation. Detailed test history is also available.

Each test set comes with learn, test and review modes. In learn mode, learners will attempt a question and will get immediate feedback and complete remediation as they move on to the next question. In test mode, learners can take a timed test simulating the actual exam conditions. In review mode, learners can read through one item at a time without attempting it.

12. Post-Assessment

After completion of the uCertify course Post-Assessments are given to students and often used in conjunction with a Pre-Assessment to measure their achievement and the effectiveness of the exam.

GET IN TOUCH:

3187 Independence Drive
Livermore, CA 94551,
United States

+1-415-763-6300

support@ucertify.com

www.ucertify.com