

Webmaster - Javascript - Level 4 Online Course

Key Information

Course Format:
Online Course

Price:
£225.00

Assessment:
Assignments

Payment Options:
Spread the cost over 4 monthly payments

Approximate Study Time:
200 Hours of Self Study

Initial Payment of
£90.00

Approximate Delivery Time:
1-2 Working Days via Email

Followed by 3 payments of:
£45.00



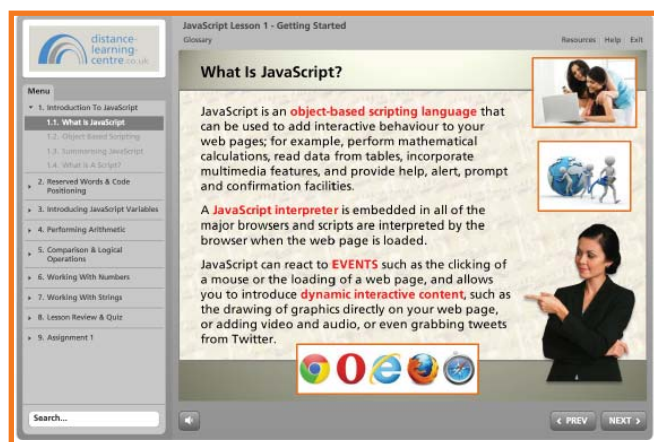
The **Webmaster - JavaScript Web Design Course** is designed to introduce students with a working knowledge of Web Design to the fundamentals of JavaScript (an object-based, event-driven Web programming language), which tightly integrates with HTML.

Students will learn the fundamentals of JavaScript through a series of interesting assignments and as the course progresses, the student's skills are honed via the development of a number of dynamic, interactive games such as the Minefield and Connect 4 games. The final assignment consists of the development of a technically demanding 'Owzat cricket game, where the extensive JavaScript and jQuery skills learned during the course, are brought together to create a stunning application, which you will be rightly proud of.

On successful completion of the course, students will receive the Distance Learning Centre Webmaster - JavaScript Diploma with comprehensive feedback and analysis of your completed work, as well as the Open Awards Quality Endorsed Unit Course Certificate.

The training programme is delivered through the Distance Learning Centre's new on-line training portal, which is accessed via a web browser such as Internet Explorer, Firefox, Chrome, or Safari. Throughout the course students are supported by a personal course tutor who can give feedback on your work at any time throughout your study.

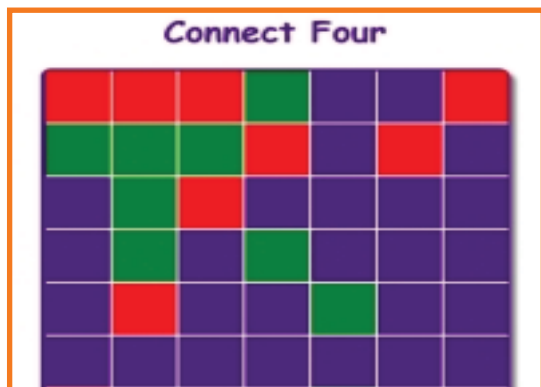
The training programme consists of 10 individual lessons, which are designed to gradually build up and strengthen your technical knowledge. Throughout the lessons, interactive exercises have been specially designed to support the student's learning effort, and multiple-choice quizzes and assignments at the end of each lesson serve to ensure a thorough understanding of the course content.



Students are taken step-by-step through the lessons using innovative, interactive, multi-media computer-based training techniques, supported by highly-trained technical support specialists. The course is self-paced with no time pressure for completion; the student simply studies at home or at work when time permits.

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Interactive Games that students will create:



During the course, you will learn how to:

- create powerful JavaScript functions and event handlers;
- implement dynamic HTML5 API's such as drag and drop and geolocation;
- work with jQuery to produce visually stunning effects and animations;
- incorporate AJAX and JSON technology;
- use the JavaScript Console, with debugging techniques and breakpoints; and
- construct powerful interactive web-based applications.

The course consists of the following lessons:

• Lesson 1 – Getting Started With JavaScript

The following topics are covered: Introduction to JavaScript; Reserved Words & Code Positioning; Introducing JavaScript Variables; Performing Arithmetic; Comparison & Logical Operations; Working With Numbers; Working With Strings; Lesson Review & Quiz; and Assignment 1 – Scripting Exercises.

• Lesson 2 – JavaScript Event Handlers

The following topics are covered: Introduction to Events & Event Handlers; Browser Window Event Handlers; Event Listeners; Form Event Handlers; Mouse Event Handlers; Keyboard Event Handlers; HTML5 Event Handlers; Lesson Review & Quiz; and Assignment 2 – Using Event Handlers Exercises.

• Lesson 3 – Expanding Your JavaScript Knowledge

The following topics are covered: JavaScript's Built-in Objects; Introducing Document Object Model Objects; Custom Objects; JavaScript Functions; Working With Arrays; Controlling The Flow; Let's Play Hide & Seek – Build Your First Interactive Game; Looping The Loop; Lesson Review & Quiz; and Assignment 3 – JavaScript Exercises.

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● Lesson 4 – The Document Object Model

The following topics are covered: What Is the Document Object Model?; The Top Level Window Object; The Document Object; Forms Objects; Working With Window Objects; Timer Objects; Document Interaction; Lesson Review & Quiz; and Assignment 4 – Health Insurance Questionnaire.

● Lesson 5 – Error Handling & Debugging

The following topics are covered: Understanding the JavaScript Interpreter; Understanding & Dealing With Errors; The JavaScript Console; Using Breakpoints; Handling Exceptions; Debugging Hints & Common Errors; A Guide To Good Scripting; Graphic Design Considerations; Lesson Review & Quiz; and Assignment 5 – Build The "What Am I?" Game.

● Lesson 6 – Building The Minefield Game App

The following topics are covered: Designing The Game; Building the HTML Framework; Adding Style With CSS; Populating The Grid With Random Mines; Adding Skill Levels and Sound Effects; Tracking Hits & Misses; Testing & Quality Assurance; Lesson Review & Quiz; and Assignment 6 – Build A Matching Pairs Game.

● Lesson 7 – Application Programming Interfaces

The following topics are covered: Introducing the HTML5 JavaScript APIs; The Drag & Drop API; The Web Storage API; The Messaging API; The History API; The Geo-location API and Google Maps; The Canvas API; Lesson Review & Quiz; and Assignment 7 – Shape Drawing Exercise

● Lesson 8 – Introduction to JQuery

The following topics are covered: What is jQuery?; Finding And Working With Elements; Creating A simple jQuery App; Handling Events With jQuery; Effects & Animation Methods; Working With jQuery Form Elements; Dimension & Positioning Methods; The jQuery User Interface; Lesson Review & Quiz; and Assignment 8 – Build A Noughts & Crosses Game.

● Lesson 9 – JavaScript Plus

The following topics are covered: Introducing AJAX; JavaScript Object Notation (JSON); Server Side JavaScript; Function Closure Explained; What Are Prototypes?; Regular Expressions & Recursion; Working With Cookies; Adding & Removing Event Listeners; Lesson Review & Quiz; and Assignment 9 – Build A Connect Four Game.

● Lesson 10 - Building The Owzat Cricket Game

The following topics are covered: Game Overview; Creating The Game Framework With HTML & CSS; Planning The JavaScript Functions; Controlling The Game; Provide A Scoreboard To Show Current Status; Generate Random Batting Strokes & Bowling Appeals; A function To Update Status; Testing & Quality Assurance; Lesson Review & Quiz; and Assignment 10 – Build Your Own Owzat Game.

Prerequisites:

Students require a good knowledge of HTML Programming. This course assumes you have completed the Webmaster - Level 2 Course or have studied HTML to an equivalent level.

We recommend this course is completed on a PC with the Windows Operating System or on an Apple Mac. As this is an online course it can be accessed on any Internet Ready computer.

Course Duration & Support:

Students may register at any time and have a full year to complete their studies. You also have access to a personal tutor by mail or email for a 12 month period. Course extensions can be purchased if you do not complete this course within the 12 month period. As the course is self-study you can complete in as little or as long a time as you prefer.

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Assessment:

You will be assessed on coursework which is detailed in the course materials. The coursework consists of individual web pages and a complete final website. Your work can be sent back to your course tutor by email or by post.

Certification:

On successful completion of this course students will receive our Webmaster – JavaScript Diploma with comprehensive feedback and providing the assignments have been completed to the required standards students will also receive a Level 4 Open Awards Quality Endorsed Unit Course Certificate.



The course measurable learning outcomes have been benchmarked at Level 4 (using Ofqual's Qualification and Credit Framework (QCF) level descriptors) to allow you to consider the depth of study, difficulty, and level of achievement involved.

You can find further information on qualifications/certificates and their levels on the Ofqual Qualification & Credit Framework level descriptors page.

The certification is issued through Open Awards. Open Awards are an Awarding Body Organisation approved by Ofqual. Set up in 1981, Open Awards (Previously the North West Region of the National Open College Network - OCNW) have been in business for over 30 years and are a not for profit organisation and a registered charity.