



DTC – The Complete Web Developer Course

DREAMWEAVER

OBJECTIVES

The DTC–Dreamweaver course is targeted for who know some knowledge of Webpage and HTML:

- Understanding HTML and CSS
- Creating the Site Structure
- Use AP Element to Create Interactive Images
- Updating Published Files

TARGET GROUP

- Anyone who has some knowledge of Web Page Design and format.
- High school and university students (plus two, undergraduate, etc.) who want to do coursework
- Someone who is already working with Web Page and Design

TRAINING METHOD

- The course is spread over 12 hours that consists of lecture and lab work. There will be approximately 6 hours of lectures and 8 hours of hands-on lab work.
- Lab exercises are mandatory, have a fixed deadline, and are graded. The course puts heavy emphasis on lab exercises because software programming can only be learnt well by explicitly putting into practice the principles that have been taught (i.e. in simpler terms – by doing lots and lots of coding). Late submission (past the deadline) of exercises incurs some penalty from total points.
- Instructors may provide relevant lecture/lab notes to students as (and when) necessary in the form of printed handouts and or via emails.
- Instructors may provide supplementary code snippets to students via email or in lab class to support the theory and or lab material that is being taught.

COURSE DURATION

- 15 hours
- Classes
 - ✓ Morning/Evening

COURSE BREAKDOWN

Theory:

1. What is Dreamweaver?
 - Using the Dreamweaver Workspace
 - Working with the Document Window
 - Setting Your Preferences
 - Getting Help
 - Understanding the Site Creation Process
 - Creating the Site Structure
 - Defining the Site
 - Understanding HTML and CSS

2. Creating a New Document
 - Defining Page Properties
 - Creating a Layout
 - Adding Text
 - Importing a Word Document
 - Including Existing HTML Documents
 - Creating a Template
 - Using a Template

3. Understanding Objects
 - Exploring the Assets Panel
 - Inserting Images
 - Creating Rollover Images
 - Previewing a Document
 - Using AP Elements to Create Interactive Images
 - Attaching Behaviors to AP Elements
 - Using Library Items

4. Creating a Table
 - Adding Elements to a Table
 - Creating a Form
 - Adding Form Controls
 - Inserting Multimedia Objects

5. Understanding Links
 - Creating a Text Link
 - Creating an Image Link
 - Creating an Image Map
 - Inserting a Navigation Bar
 - Adding a Jump Menu
 - Working with the Site Map

6. Understanding Text Formatting Options
 - Formatting Text
 - Creating Lists
 - Formatting Tables
 - Creating Frames
 - Using Frames

7. Introduction to CCS
 - Creating and Applying CSS Styles
 - Working with Style Sheets
 - Modifying CSS Styles
 - Using CSS Layouts
 - Adding AP Elements

8. Generating Reports
 - Checking Links
 - Validating Tags
 - Checking Target Browsers
 - Publishing to a Remote Site
 - Using Check In/Check Out
 - Updating Published Files
 - Synchronizing Files

JAVA SCRIPT:

OBJECTIVES

The Deerwalk Training Center (DTC) – Java Script course is targeted for beginners who want to:

- Learn how to think and write meaningful piece of code in Java Script.
- Learn how to read Java Script code that has been written by somebody else.
- Learn how to map literary description of a problem (requirement) to an application/library coded in Java Script. In summary, this course teaches how to program using Java Script programming language.

This is a core basic level course that is essential for anyone who have no prior programming experience but wish to be a professional Java Script engineer in future.

TARGET GROUP

- Anyone who has some basic knowledge about programming and wants to learn to write applications in Java Script for any purpose e.g. curiosity, hobby, to complete an academic project, to work towards a career as Java Script, to help in project management, etc.

Prerequisites:

- Basic knowledge about programming, bits/bytes, procedures, classes, computer architecture, etc. If you just have a theoretical knowledge that is perfectly okay but you should have strong convictions on what programming is, and what you hope to achieve from this class.
- Willing and eager to spend at least 10-20 hours (varying from student-to-student) per week outside of the training class to read/write codes in Java (self-study and practice).
- There is no prior educational level requirement for this course. Anyone from 10+2 student to someone who is doing her PHD in Genetic Engineering is welcome to take this course.

TRAINING METHOD

- Lab exercises are mandatory, have a fixed deadline, and are graded. The course puts heavy emphasis on lab exercises because software programming can only be learnt well by explicitly putting into practice the principles that have been taught (i.e. in simpler terms – by doing lots and lots of coding).
- Instructors may provide relevant lecture/lab notes to students as (and when) necessary in the form of printed handouts and or via emails.
- Instructors may provide supplementary code snippets to students via email or in lab class to support the theory and or lab material that is being taught.

COURSE DURATION

- 20 hours
- Classes
 - ✓ Morning/Evening

COURSE BREAKDOWN

1. UNDERSTANDING JAVASCRIPT
 - Introduction
 - History of JavaScript
 - Tools for JavaScript Development
 - Introduction to Web Console
 - Adding JavaScript to HTML
2. WORKING WITH DATA
 - Variable
 - Data types
 - Arithmetic operators and math
 - Strings and Numbers
 - Conditional statement and logic
 - Arrays
 - Properties and methods in Arrays
 - Loops
 - Looping through Arrays
 - Break and continue loops
3. FUNTIONS AND OBJECTS
 - Functions in JavaScript
 - Argument and return values
 - Variable scop
 - lets and const
 - Objects
 - Object constructors
 - Closures
4. JAVASCRIPT DOM ELEMENTS
 - DOM: Document Object Model
 - Query Selectors
 - Access and change elements, classes, and attributes
 - Add DOM elements
 - Apply CSS to elements

[Class Project: Create an Analog Clock]

JAVASCRIPT DOM EVENTS

- What are DOM events?
- Typical DOM events
- Trigger functions with event handlers
- Add and use event listeners
- Pass argument via event listeners

[Class Project: Typing Speed Tester]

[Class Project: Automated Responsive Images Markup]

JQuery

OBJECTIVE

The Deerwalk Training Center (DTC) – JQuery course is targeted for beginners who want to:

- Learn how to think and write meaningful piece of code in Java Script.
- Learn how to read Java Script code that has been written by somebody else.
- Learn how to map literary description of a problem (requirement) to an application/library coded in Java Script. In summary, this course teaches how to program using JQuery programming language.

This is a core basic level course that is essential for anyone who have no prior programming experience but wish to be a professional Java Script engineer in future.

TARGET GROUP

- Anyone who has some basic knowledge about programming and wants to learn to write applications in Java Script for any purpose e.g. curiosity, hobby, to complete an academic project, to work towards a career as JQuery, to help in project management, etc.

Prerequisites:

- Basic knowledge about programming, bits/bytes, procedures, classes, computer architecture, etc. If you just have a theoretical knowledge that is perfectly okay but you should have strong convictions on what programming is, and what you hope to achieve from this class.
- Willing and eager to spend at least 10-20 hours (varying from student-to-student) per week outside of the training class to read/write codes in Java (self-study and practice).
- There is no prior educational level requirement for this course. Anyone from 10+2 student to someone who is doing her PHD in Genetic Engineering is welcome to take this course.

TRAINING METHOD

- Lab exercises are mandatory, have a fixed deadline, and are graded. The course puts heavy emphasis on lab exercises because software programming can only be learnt well by explicitly putting into practice the principles that have been taught (i.e. in simpler terms – by doing lots and lots of coding).
- Instructors may provide relevant lecture/lab notes to students as (and when) necessary in the form of printed handouts and or via emails.
- Instructors may provide supplementary code snippets to students via email or in lab class to support the theory and or lab material that is being taught.
- Students are graded on the basis of attendance, lab exercises and exam in the increasing order of importance.

COURSE DURATION

- 15 hours
- Classes
 - ✓ Morning/Evening

COURSE BREAKDOWN

1. QUICK INTRODUCTION

- What is jQuery?
- Setting up the environment
- First jQuery enabled page
- Selectors and filters
- Creating and modifying page content
- Handling events
- Animation page content

2. WORKING WITH PAGE CONTENT

- Basic and advanced selectors
- Basic, attribute, and advanced filters
- Traversing documents with JQuery
- JQuery Statement Chaining
[Class Project: Scripting challenge]

3. MANIPULATING PAGE CONTENT

- Creating page content
- Inserting, altering and manipulating page content
- Manipulating attributes
- Working with CSS
- Embedding custom data
[Class Project: Scripting challenge]

4. JQuery EVENTS

- jQuery event handling features
- Binding and unbinding events
- Event helper features
- Using jQuery event object
[Class Project: Scripting challenge]

5. ANIMATION AND EFFECTS

- Introduction to jQuery animations
- Hiding and showing elements
- Fading elements
- Sliding elements
- Custom animations
[Class Project]

Ajax

OBJECTIVE

The Deerwalk Training Center (DTC) – Ajax course is targeted for beginners who want to:

- Learn how to think and write meaningful piece of code in Ajax.
- Learn how to read Java Script code that has been written by somebody else.
- Learn how to map literary description of a problem (requirement) to an application/library coded in Java Script. In summary, this course teaches how to program using Ajax programming language.

This is a core basic level course that is essential for anyone who have no prior programming experience but wish to be a professional Ajax engineer in future.

TARGET GROUP

- Anyone who has some basic knowledge about programming and wants to learn to write applications in Java Script for any purpose e.g. curiosity, hobby, to complete an academic project, to work towards a career as JQuery, to help in project management, etc.

Prerequisites:

- Basic knowledge about programming, bits/bytes, procedures, classes, computer architecture, etc. If you just have a theoretical knowledge that is perfectly okay but you should have strong convictions on what programming is, and what you hope to achieve from this class.
- Willing and eager to spend at least 10-20 hours (varying from student-to-student) per week outside of the training class to read/write codes in Java (self-study and practice).
- There is no prior educational level requirement for this course. Anyone from 10+2 student to someone who is doing her PHD in Genetic Engineering is welcome to take this course.

TRAINING METHOD

- Lab exercises are mandatory, have a fixed deadline, and are graded. The course puts heavy emphasis on lab exercises because software programming can only be learnt well by explicitly putting into practice the principles that have been taught (i.e. in simpler terms – by doing lots and lots of coding).
- Instructors may provide relevant lecture/lab notes to students as (and when) necessary in the form of printed handouts and or via emails.
- Instructors may provide supplementary code snippets to students via email or in lab class to support the theory and or lab material that is being taught.
- Students are graded on the basis of attendance, lab exercises and exam in the increasing order of importance.

COURSE DURATION

- 15 hours
- Classes
 - ✓ Morning/Evening

COURSE BREAKDOWN

1. GETTING STARTED
 - What is AJAX?
 - Using a synchronous XHR request
 - Making request asynchronous
 - Scripting for backwards compatibility

2. MODIFYING THE DOM
 - Update the DOM with getElementById
 - Modifying elements with getElementsByTagName
 - Parsing XML using AJAX
 - Reading JSON files
 - Using event-driven AJAX

3. jQuery AJAX
 - Understand jQuery AJAX methods
 - Create and AJAX request in jQuery
 - Work with the data returned from a jQuery AJAX request
 - Reading data with jQuery

4. AJAX IN ACTION
 - Preparing a live search AJAX app
 - Sending JSON data to the page
 - Searching JSON data
 - Styling an application
 - Adding CSS3 animations
[Class Project: ZIP code lookup]

Vue.js

OBJECTIVE

The Deerwalk Training Center (DTC) – Vue.js course is targeted for beginners who want to:

- Learn how to think and write meaningful piece of code in Vue.js.
- Learn how to read Java Script code that has been written by somebody else.
- Learn how to map literary description of a problem (requirement) to an application/library coded in Java Script. In summary, this course teaches how to program using Vue.js programming language.

This is a core basic level course that is essential for anyone who have no prior programming experience but wish to be a professional Vue.js engineer in future.

TARGET GROUP

- Anyone who has some basic knowledge about programming and wants to learn to write applications in Java Script for any purpose e.g. curiosity, hobby, to complete an academic project, to work towards a career as Vue.js, to help in project management, etc.

Prerequisites:

- Basic knowledge about programming, bits/bytes, procedures, classes, computer architecture, etc. If you just have a theoretical knowledge that is perfectly okay but you should have strong convictions on what programming is, and what you hope to achieve from this class.
- Willing and eager to spend at least 10-20 hours (varying from student-to-student) per week outside of the training class to read/write codes in Java (self-study and practice).
- There is no prior educational level requirement for this course. Anyone from 10+2 student to someone who is doing her PHD in Genetic Engineering is welcome to take this course.

TRAINING METHOD

- Lab exercises are mandatory, have a fixed deadline, and are graded. The course puts heavy emphasis on lab exercises because software programming can only be learnt well by explicitly putting into practice the principles that have been taught (i.e. in simpler terms – by doing lots and lots of coding).
- Instructors may provide relevant lecture/lab notes to students as (and when) necessary in the form of printed handouts and or via emails.
- Instructors may provide supplementary code snippets to students via email or in lab class to support the theory and or lab material that is being taught.
- Students are graded on the basis of attendance, lab exercises and exam in the increasing order of importance.

COURSE DURATION

- 15 hours
- Classes
 - ✓ Morning/Evening

COURSE BREAKDOWN

1. INTRODUCTION

- Get to know Vue
- Vue Benefits
- What you should know

2. THE SIMPLEST FORM

- Adding Vue to a web page
- Understand execution flow
- A Bootstrap detour
- Thinking declaratively with data binding
- Understanding two-way data binding
- Methods and event handling

3. ESSENTIAL DIRECTIVES, OPTIONS, AND TOOLS

- Rendering elements conditionally
- Loading data asynchronously
- Using the created lifecycle hook
- Using the Vue Devtools browser extension
- Rendering list with v-for
- Using additional v-for parameters
- Combining v-for with event handling
- Using computed peroperties

4. ENHANCING USER INTERFACES

- Adding dynamic style attributes
- Adding dynamic class attributes
- Using CSS transitions
- Applying transitions to lists
- Using CSS anmiations

5. Vue COMPONENTETS

- Using Vue components
- Registering and using components
- Adding component props
- Managing component content with slots
- Componentizing existing in-DOM templates
- Handling events in component
- Vue CLI
- nstalling Vue CLI

- Vue CLI project template
- Moving to single-file components
- Building for production

Programming in PHP/MYSQL

OBJECTIVES

The DTC – Programming in PHP/MYSQL course is targeted for beginners who want to:

- Learn how to think and write meaningful piece of code in PHP/MYSQL.
- Learn how to read PHP/MYSQL code that has been written by somebody else.
- Learn how to map literary description of a problem (requirement) to an application/library coded in PHP/MYSQL. In summary, this course teaches how to program using PHP/MYSQL programming language.

This is a core basic level course that is essential for anyone who have no prior programming experience but wish to be a professional PHP/MYSQL engineer in future

TARGET GROUP

- Anyone who has some basic knowledge about programming and wants to learn to write applications in PHP/MYSQL for any purpose e.g. curiosity, hobby, to complete an academic project, to work towards a career as PHP/MYSQL programmer, to help in project management, etc.

Prerequisites:

- Basic knowledge about programming, bits/bytes, procedures, classes, computer architecture, etc. If you just have a theoretical knowledge that is perfectly okay but you should have strong convictions on what programming is, and what you hope to achieve from this class.
- Willing and eager to spend at least 10-20 hours (varying from student-to-student) per week outside of the training class to read/write codes in PHP/MYSQL (self-study and practice).
- There is no prior educational level requirement for this course. Anyone from 10+2 student to someone who is doing her PHD in Genetic Engineering is welcome to take this course.
- If you are only interested in theory and have no interest/patience in spending at least 10 hours every week throughout the duration of the course, then this course is clearly not for you.
- If you have absolutely no idea about programming or do not see yourself doing programming in the next six -odd months, then this class may not be for you!

TRAINING METHOD

The course is spread over 40 hours that consists of lecture and lab work. There will be approximately 10 hours of lectures and 30 hours of hands-on lab work.

- Lab exercises are mandatory, have a fixed deadline, and are graded. The course puts heavy emphasis on lab exercises because software programming can only be learnt well by explicitly putting into practice the principles that have been taught (i.e. in simpler terms – by doing lots and lots of coding). Late submission (past the deadline) of exercises incur some penalty from total points.
- Instructors may provide relevant lecture/lab notes to students as (and when) necessary in the form of printed handouts and or via emails.
- Instructors may provide supplementary code snippets to students via email or in lab class to support the theory and or lab material that is being taught.
- At the end of the course, students may have to give an exam (which will be optional), that will test their knowledge on the material covered during the course. This exam may be practical and/or theoretical and is mandatory for any student wishing to join a higher level.
- Students are graded on the basis of attendance, lab exercises and exam in the increasing order of importance.

In summary, the only effective way to learn programming is to write lots of code. So, in order to really make this training productive, students are encouraged to spend as much time as necessary to complete the lab exercises on time. As part of the course, students will spend at least 30 hours in the lab but especially if you are new to programming or are coming from a non-computer-science background, it is recommended that you spend at least 10-20 hours per week outside of the class on your own to practice coding in PHP/MYSQL.

COURSE DURATION

- 40 hours
- Classes
 - ✓ Morning/Evening

COURSE BREAKDOWN

1. UNDERSTANDING THE PHP/ MYSQL BASICS
 - How PHP works
 - The PHP.ini file
 - PHP tags
 - PHP Statements and Whitespaces
 - Comments
 - PHP functions
2. VARIABLES
 - Variable types
 - Variables Names
 - Constant
3. FLOW CONTROLS
 - If statements
 - For loop
 - While loop
 - Case statement
4. REUSING CODE AND WRITING FUNCTIONS
 - Including files and Writing functions
 - Require
 - Require_once
 - Include
 - User functions
 - Defining and calling functions
5. INTRODUCTION TO DATABASE
 - Basic difference between database and file system
 - Introduction of MySQL
 - Connection mechanism using PHP and MYSQL
 - Create table, select, insert, update and delete command
 - Making form with JQuery validation and inserting in table
 - Displaying all rows of table and disable in HTML table format.
 - Edit records using HTML form.
 - Delete records
 - Single-Dimensional Arrays
 - Multidimensional Arrays
 - Casting Arrays
 - Associative Arrays
 - Accessing Arrays
 - Getting the size of an array
 - Looping through an array
 - Looping through an associative array
 - Examining array
 - Joining arrays

- Sorting arrays
- Working EXAMPLES (Lab)

6. FUNCTIONS

- What is a function
- Defining a function
- Returning value from function
- User-defined functions
- Variable scope
- Accessing variable with the global statement
- Function calls with the static statement
- Setting default values for arguments
- Passing arguments to a function by value
- Passing arguments to a function by reference
- Testing for function existence
- Working EXAMPLE (Lab)

7. CLASSES AND OBJECTS

- Objects oriented programming
- Define a class
- An Object
- Creating an object
- Object properties
- Object methods
- Object constructors and destructors
- Class constants
- Class inheritance
- Abstract classes and methods
- Object serialization
- Checking for class and method existence
- Exceptions
- Iterators

8. COOKIES

- The anatomy of a cookie
- Setting a cookie with PHP
- Deleting a cookie
- Creating session cookie
- Working with the query string
- Creating query string
- Working EXAMPLES (Lab)

9. SESSION

- What is session
- Starting a session
- Working with session variables
- Destroying session
- Passing session Ids

- Encoding and decoding session variables
- Working EXAMPLE (Lab)

LABS

Lab assignments will focus on the practice and mastery of contents covered in the lectures; and introduce critical and fundamental problem-solving techniques to the students.

DISCLAIMER

Please note that Deerwalk Training Center reserves the right to change the course syllabus of DTC – Programming in PHP/MYSQL – Level 1 course at any time without prior notification.