



INTRODUCTION TO THE CRASH COURSE FOR SEE STUDENTS

HTML and CSS

Nature of the Course: Theory + Practical

Total Hours per Day: 2 Hours

Course Duration: 2 Weeks

Course Summary

The course's first module introduces students to web development and the basic technology that is used to define the structure of a webpage. The first session also sets the scene and familiarizes you with key ideas and syntax, including how to apply HTML to text, construct hyperlinks, utilizing HTML to structure a webpage, creating client-side parts of the form, and covering basic table markup, along with more complex features such as implementing captions and summaries. Additionally, in week two of this module CSS is used to style and lay out web pages — for example, to alter the font, color, size and spacing of your content, split it into multiple columns, or add animations and other decorative features.

This module gets you started on the path to CSS.

Completion Criteria

After fulfilling all of the following criteria, the student will be deemed to have finished the Module:

- Has attended 90% of all classes held
- Has received an average grade of 80% on all assignments
- Has received an average of 60% in assessments
- The tutor believes the student has grasped all of the concepts and is ready to go on to the second module.

Required Textbooks

- HTML & CSS: The Complete Reference, Fifth Edition

Prerequisites

- There is no prior educational level requirement for 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 might not be 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!

Course Details

Week I

Web Programming Introduction

HTML-Introduction

- History of HTML
- What you need to do to get going and make your first HTML page
- What are HTML Tags and Attributes?
- HTML Tag vs. Element
- HTML Attributes

HTML-Basic Formatting Tags

- HTML Basic Tags
- HTML Formatting Tags
- HTML Color Coding

HTML-Lists

- Unordered Lists
- Ordered Lists
- Definition List

HTML-Images

- Image Mapping

HTML – Hyperlink

- URL - Uniform Resource Locator
- URL Encoding

HTML – Table

- <table>

- <th>
- <tr>
- <td>
- <caption>
- <thead>
- <tbody>
- <tfoot>
- <colgroup>
- <col>

HTML – Frame & Form

- <input>
- <textarea>
- <button>
- <select>
- <label>

HTML – Headers

- Title
- Base
- Link
- Style s
- Script
- Meta Tag

Week II

CSS2-Introduction

- Benefits of CSS
- CSS Versions
- History

CSS Syntax

- External Style Sheet using
- <link>
- Single Style Sheets
- Multiple Style Sheets
- Value Lengths and Percentages

CSS2 – Selectors

- ID Selectors
- Class Selectors
- Grouping Selectors
- Universal Selector
- Descendant / Child Selectors
- Attribute Selectors
- CSS – Pseudo Classes

CSS2 – Color Background Cursor

- Background image
- Background repeat
- Background position
- CSS Cursor

CSS2-Text Fonts

- color
- background color
- text-decoration
- text-align
- vertical-align
- text-indent
- text-transform
- white-space
- letter-spacing
- word-spacing
- line-height
- font-family
- font-size
- font-style
- font-variant
- font-weight

CSS2-Lists Tables

- list-style-type
- list-style position
- list-style-image
- list-style

CSS Tables

- border
- width & height
- text-align
- vertical-align
- padding
- color

CSS2-Box Model

- Borders & Outline
- Margin & Padding
- Height and width
- CSS Dimensions

CSS2-Display Positioning

- CSS Visibility
- CSS Display
- CSS Scrollbars
- CSS Positioning
- Static Positioning
- Fixed Positioning
- Relative Positioning
- Absolute Positioning
- CSS Layers with Z Index
- CSS Floats

JavaScript

Nature of the Course: Theory + Practical

Total Hours per Day: 2 Hours

Course Duration: 1 Week

Course Summary

The Java course for beginners is designed for people who wish to learn how to conceive and produce meaningful Java code, as well as how to interpret JAVA code written by others and how to convert a literary description of a problem (requirement) to a Java application or library. This is a foundational course for anyone who has no prior programming knowledge but wants to become a professional Java engineer in the future or wants to see if JAVA is fit for them.

Completion Criteria

After fulfilling all of the following criteria, the student will be deemed to have finished the Module:

1. Has attended 90% of all classes held
2. Has received an average grade of 80% on all assignments
3. Has received an average of 60% in assessments
4. The tutor believes the student has grasped all of the concepts and is ready to go on to the second module.

Required Textbooks

1. Introduction to Programming Using Java by David J. Eck
2. JAVA the complete reference by Herbert Schildt

Prerequisites

- There is no prior educational level requirement for 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 might not be 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.

Course Details

Week I

Introduction to JavaScript

- Introductions, motivation: web developer, orientation.
- Introduction to Procedural Programming
- JS History
- Dynamic (JS enabled) vs. Static web sites. Front-End “big three”: HTML,
- Best Approaches to Learn JS

Variable, Value, Data type, Operators and Expressions

- Variables: and let keyword
- Statements
- Value
- JS Keywords
- Understanding Expressions

Arrays, Decision making and Loops

- String
- Arrays
- If Statement
- If-Else Statement
- If-Else-IF ladder and Nested If Statements
- Switch
- Handling repetitive tasks with loops
- For Loop
- While and Do-While Loop

Functions, Variable Scope and Objects

- Date and Math Objects

The Browser Environment

- BOM (Browser Object Model)
- Window.* properties
- DOM (document object model)
- Accessing DOM Nodes
- Modifying DOM Nodes
- Creating and Removing Nodes

Events and Event Handling

- What are Events? Listen to Events.
- Event Handling
- HTML5 Forms and Input tag (form validation)
- GET and POST Methods

WordPress, SEO, Video Editing & Public Speaking

Nature of the Course: Theory + Practical

Total Hours per Day: 2 Hours

Course Duration: 1 Week

Course Summary

This course's courses will focus on honing your extracurricular abilities. We will focus on the practical method to assist you learn public speaking in this course. There will be a lot of hands-on activities to help you gain confidence as a public speaker. In addition, video editing classes will be taught, as well as SEO and getting acquainted with WordPress.

Prerequisites

- There is no prior educational level requirement for 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 might not be for you.
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Course Details

Week I

Wordpress

SEO

Video Editing: Sony Vegas Pro

- Sony Vegas Pro Software Overview
- Projects and Media Timeline
- Split and Delete Video Clips
- Video Effects
- Transitions
- Custom Text Effects
- Flip & Mirror Clips
- Slow Motion

- Zooming
- Film Effects
- Color Correction
- Audio Effects
- Green screen removal
- Thumbnail
- Lower thirds
- Video Rendering

Public Speaking

Bonus: Basic Photography Course

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.

Learning Outcomes

This crash course is aimed to help SEE students improve their academic and extracurricular skills. Students will have gained more knowledge and a fundamental idea of what they wish to achieve after completing this course.