



SCC 219 - Introduction to WEB Development Schedule

General

- [Course in the e-Disciplinas Site](#)
- [Syllabus](#)
- [Discord server](#)
- [Individual Exercises](#)
- [Group Assignment](#)
 - Video: [Group Assignment](#)

Course Introduction

- **March 14**
 - Introduction





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- March 19

- Test 1
- Video Lesson: [HTTP Protocol 1](#)

▪ March 21

- Test 2
- Video Lesson: [HTTP Protocol 2](#)
 - Original Lesson: [HTTP Protocol 2](#) (2021-08)

▪ [Exercise 1](#)

- Slides: [HTTP Protocol](#)
- Video Lesson (Extra): [HTTP Protocol Overview](#)

Module 2: HTML**▪ March 25**

- Hands-on: [HTML5 \(Lessons 1-11\)](#).

▪ March 29

- Hands-on: [HTML5 \(Lessons 15-25\)](#).

▪ [Exercise 2](#)**▪ April 1**

- Test 3
- Video Lessons: [Internet History](#) / [HTML Origins](#)
- [Group Discussion 1](#)





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- Video Lesson (Extra):
 - História da Internet
 - Curso de HTML5: 02 - História da HTML
- Reading Material: HTML5 Tutorial
- Nonmandatory:
 - HTML Quiz
 - HTML Hands-on Exercises
 - HTML Job Interview Questions

Module 3: CSS

- **April 4**
 - Video Lesson (Extra): Introduction to CSS 3.
 - Hands-on: CSS3 (Lessons 1-15).
- **April 8**
 - Hands-on: CSS3 (Lessons 15-30).
- **April 11 - 15**
 - **Holiday Easter Break**
- Exercise 3

- Slides: CSS 3
- Video Lesson (Extra):
 - CSS Crash Course for Beginners
 - HTML5 & CSS3 na Prática
- Reading Material: CSS3 Tutorial
- Nonmandatory:
 - CSS3 Quiz
 - CSS Hands-on Exercises
 - CSS Job Interview Questions





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- April 19

- Test 4
- Video Lesson: [Wat / JavaScript & TypeScript](#)
- Hands-on: [JavaScript Course](#) (Lessons 1 - 6 & 20 - 31)
- [Exercise 4](#)

▪ April 21-22

- **Holiday Tiradentes**

▪ April 25

- Hands-on: [JavaScript vs Java Basics](#)
 - [Recording from 2021.1](#)
- [Exercise 5](#)

▪ Slides:

- [JavaScript & TypeScript](#)
- [JavaScript Programming](#)
- [JavaScript Functional Programming](#)
- [JavaScript: The Good Parts](#)
- [JavaScript JSLint](#)

▪ Videos (Extra):

- [Wat \(Ruby & JavaScript\)](#)
- [JavaScript: The Good Parts/JSLint](#)
- Video Lesson: [Functional Programming](#) (16:57 minutes)

▪ Reading Material Tutorials:

- [W3School JavaScript Tutorial](#)
- [The Modern JavaScript Tutorial](#) - Easy consulting tool for using during programming

▪ Nonmandatory:

- JavaScript [Quiz](#)
- JavaScript [Hands-on Exercises](#)
- JavaScript [Job Interview Questions](#)





- **April 29**
 - Hands-on: JavaScript Course (Lessons 7 - 19)
 - Exercise 6

Group Assignment: Milestone 1 Presentations

- **May 2**
 - Groups will present their work
- **May 6**
 - Groups will present their work

Module 5: DOM & Events (continuation)

- **May 9**
 - Test 5
 - Video Lesson: Javascript - DOM (Just the DOM part)
 - Exercise 7
- **May 13**
 - Video Lesson: JavaScript - Events
 - Exercise 8
- **May 16**
 - Test 6
 - Exercise 8 (2nd day)





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- Video (Extra): Capture & Bubbling (/ min)
- Video Lessons (Extra): DOM and DOM Events:
 - This Javascript course has many topics with longer individual lessons (more than 20 minutes). You should watch lessons 09 and 10. They cover DOM and DOM events.
- Reading Material:
 - Events
 - Form Validation
 - Handling Events
- Nonmandatory:
 - JavaScript Quiz
 - JavaScript Hands-on Exercises
 - Interview Questions: Basic DOM and Events

Module 6: AJAX Calls

- **May 20**
 - Test 7
 - Video Lesson: AJAX Calls
 - Exercise 9
- **May 23**
 - Test 8
 - Video Lesson: Promises & Async/Await
 - Exercise 9 (2nd day)





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- AJAX Calls
- Promises Async/Await
- Video Lessons (Extra):
 - AJAX Calls
 - CallBack + Promises + Await/Async
 - Promises & Async/Await
 - Async/Await (18 min)
- Reading Material: AJAX W3School Tutorial
- Nonmandatory:
 - Interview Questions: AJAX

Module 7: React or Vue

Use React or Vue materials

- **May 27**
 - Video Lesson: Angular vs React vs Vue
 - Group Discussion 2
- **May 30**
 - Hands-on: React Functional (with Hooks)
 - Hands-on: Vue (Lessons 1 - 27)
 - Exercise 10
- **June 3**
 - Exercise 10 (2nd day)
- **June 6**
 - Group Discussion 2 - **Presentations**





- React Material
 - Tutorial: React Fullstack - Intro to React
 - Exercise: FreeCodeCamp - React

- Vue Material

- Video Course (Extra):
 - Vue CLI (Lessons 28 - 29)

Vue CLI is a command-line tool to generate Vue applications from official templates (including Webpack integration, etc.).

- Projeto GitHub Issues (Lessons 30 - 38)

GitHub Issues is a simple project that shows the issue list of a Github project given the name of a user and one of his projects.

- Vídeo Lesson (Alternative): Vue.js

Section 00 shows interesting VS Code extensions for Vue. It is recommended that you watch up to section 19.

- Reading Material:
 - Vue.js Guide Tutorial
 - Vue.js Cookbook Tutorial
- Nonmandatory:
 - Interview Questions: Vue.js



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- June 10

- Video Lesson: [Node.js Intro](#)
- [Exercise 11](#)

▪ **June 13**

- Test 9
- Hands-on: [Web Application in Node.js: CRUD](#)
 - Based on the [Node.js Course](#) (Lessons 1 - 12)
- [Exercise 12](#)

▪ **June 16-17**

- **Holiday Corpus Christ**

▪ **June 20**

- Hands-on: [Web Application in Node.js: MongoDB](#)
 - Based on the [Node.js Course](#) (Lessons 13 - 22)
- [Exercise 12](#) (2nd day)

▪ **June 24**

- Hands-on: [Web Application in Node.js: Vue.js Client](#) (Lessons 1- 11)
 - Original: [Web Application in Node.js: Vue.js Client](#)

- Code: [Web Application in Node.js.zip](#)

- Slides: [Node.js Intro](#)

- Video Lesson (Extra):

- [Node.js Course](#) (total duration 4:39:00)
 - This video course teaches how to create the server-side of a Web Application using MongoDB. It teaches everything you need to know to write the server-side of the Group Assignment.
 - **Note:** This course uses online resources that have changed over time! Read the corrections in the [Errata](#) (from Lesson 13)! If you find other undocumented problems, please report them to us.
 - **Tip:** Lessons 30 - 40 teach functionalities not needed to implement the Group Assignment server. However, they are important when implementing real Web Applications. Specially:



- Lesson 30: Configuration file



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■ LESSON 37. AUTHENTICATION

- Video Lessons (Extra): [Blog Tool Project in Node.js](#)
 - This course covers Node.js focusing on the creation of applications using traditional HTML pages (not SPAs).
 - Basic Node.js: (1 - 10) duration 1:38:00
 - MySQL: (11 - 26) duration 2:15:00
 - MongoDB: (27 - 30)
 - Practical project using Express: (31 - 63)
- Reading Material:
 - [Node.js](#) Tutorial
 - [Node.js tutorial in VS Code](#) Tutorial
 - [Learn Node.js](#)
- Nonmandatory:
 - Job Interview Questions:
 - [Top Node.js](#)
 - [Top 25 Node.js Interview Questions & Answers](#)
 - [8 Essential Node.js Interview Questions](#)
 - [Node.js Author Ryan Dahl 2011 Talk](#) 1:06:00

Group Assignment: Milestone 2 Presentations

- **June 27**
 - Groups will present their work
- **July 1**
 - Groups will present their work





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- July 7

- Test 10
- Video Lesson: NoSQL
 - Video Turma I (2021.7)
 - Video presented in the lesson: NoSQL Introduction
- Group Discussion 3

▪ July 8

- Questions about the group assignment

▪ July 11

- Group Discussion 3 - **Presentations**
- Video Lesson (Extra): MongoDB
 - Mongo DB (2021.7 From 51:40)
- Video presented in the lesson: Introdução ao MongoDB I (18:00)
- CouchDB Lesson (Extra)





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- NoSQL
- MongoDB
- CouchDB
- Video Lesson (Extra):
 - NoSQL (2020.11).
 - MongoDB (2020.11).
 - The 3 videos shown in the NoSQL Introduction video:
 - NoSQL, CAP Theorem e BASE (49:00)
 - Teorema CAP Explicado! (7:00)
 - Banco de Dados NoSQL (6:00)
- Videos About MongoDB
 - Video presented in the lesson: Introdução ao MongoDB I (18:00)
 - Introdução ao MongoDB II - Importando e Consultando Documentos (18:00)
 - Introdução ao MongoDB III - Modelagem de Banco de Dados Não Relacionais (16:00)

Module 10: IndexDB/Workers (Extra)

- Video Lesson: Service Worker (13:00)
 - Service Workers can transform a SPA application in a desktop/mobile application that is, in many aspects, better than a native application.
- Video Lesson: IndexedDB (43:00)





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- July 10
 - Final Presentations
- July 18
 - Final Presentations
- July 22
 - Final Test

Dilvan Moreira dilvan@icmc.usp.br

