

Schedule

A week-by-week breakdown of the material.

Week 1 (01/05-01/09)

- Day 1
 - History of Javascript¹
 - Components of a Web Page²
 - How to run Javascript³
 - Numbers in Javascript⁴
 - Assignment 1⁵
- Day 2
 - Local and Global Variables⁶
 - Basics of Arrays⁷
 - Basics of Objects⁸
 - Assignment 2⁹
- Day 3
 - Strings and Regular Expressions¹⁰
 - Function basics¹¹
 - Assignment 3¹²
- Day 4
 - Basics of Version Control¹³
 - Git basics¹⁴
 - GitHub basics¹⁵
 - Review of Git commands¹⁶
 - Lab 1: Fork, Pull, Commit, Push¹⁷

¹[notes/history.html](#)

²[notes/page_components.html](#)

³[notes/how_to_run.html](#)

⁴[notes/numbers.html](#)

⁵[assignments/1.html](#)

⁶[notes/local_vs_global.html](#)

⁷[notes/array_basics.html](#)

⁸[notes/object_basics.html](#)

⁹[assignments/2.html](#)

¹⁰[notes/strings_and_re.html](#)

¹¹[notes/functions_basic.html](#)

¹²[assignments/3.html](#)

¹³[notes/git_version_control.html](#)

¹⁴[notes/git_basics.html](#)

¹⁵[notes/github_basics.html](#)

¹⁶[notes/git_commands_review.html](#)

¹⁷[labs/1.html](#)

Week 2 (01/12-01/16)

- Day 1
 - Functions as Closures¹⁸
 - Array Collection methods¹⁹
 - Assignment 4²⁰
- Day 2
 - Functions as a means for creating a scope/context²¹
 - Some tricks using functions²²
 - Functions created in loops²³
 - Assignment 5²⁴
- Day 3
 - Methods in objects. Using this²⁵
 - Object creation forms. Prototypes²⁶
 - Assignment 6²⁷
- Day 4
 - Writing tests²⁸
 - Lab 2: Node, Testing²⁹

Week 3 (01/19-01/23)

- Day 1
 - Function call forms and the value of this³⁰
 - Introduction to the concept of Design Patterns³¹
- Day 2
 - Creation Patterns: Constructor³²

¹⁸[notes/function_closures.html](#)

¹⁹[notes/array_methods.html](#)

²⁰[assignments/4.html](#)

²¹[notes/functions_for_scope.html](#)

²²[notes/function_tricks.html](#)

²³[notes/functions_in_loops.html](#)

²⁴[assignments/5.html](#)

²⁵[notes/object_methods.html](#)

²⁶[notes/object_creation_prototypes.html](#)

²⁷[assignments/6.html](#)

²⁸[notes/test_writing.html](#)

²⁹[labs/2.html](#)

³⁰[notes/function_calls_and_this.html](#)

³¹[notes/design_patterns.html](#)

³²[notes/pattern_constructor.html](#)

- Creation Patterns: Singleton³³
 - Creation Patterns: Mixins³⁴
 - Assignment 7³⁵
- Day 3
 - Introduction to the DOM (Document Object Model)³⁶
 - Manipulating the DOM tree³⁷
 - Assignment 8³⁸
- Day 4
 - Data Structures in Javascript³⁹
 - Lab 3: Union/Find, Sets⁴⁰

Week 4 (01/26-01/30)

- Day 1
 - Introduction to DOM Events⁴¹
 - Bubbling of Events⁴²
 - Assignment 9⁴³
- Day 2
 - Timers⁴⁴
 - Function idiom: Throttling⁴⁵
 - Assignment 10⁴⁶
- Day 3
 - A custom Event module⁴⁷
- Day 4
 - Lab 4: Starting on a TODOapp⁴⁸

³³[notes/pattern_singleton.html](#)

³⁴[notes/pattern_mixin.html](#)

³⁵[assignments/7.html](#)

³⁶[notes/dom_intro.html](#)

³⁷[notes/dom_tree.html](#)

³⁸[assignments/8.html](#)

³⁹[notes/data_structures.html](#)

⁴⁰[labs/3.html](#)

⁴¹[notes/event_intro.html](#)

⁴²[notes/event_bubbling.html](#)

⁴³[assignments/9.html](#)

⁴⁴[notes/event_timers.html](#)

⁴⁵[notes/function_throttling.html](#)

⁴⁶[assignments/10.html](#)

⁴⁷[notes/event_custom.html](#)

⁴⁸[labs/4.html](#)

Week 5 (02/02-02/06)

- Day 1
 - Behavioral Patterns: Observer⁴⁹
 - Behavioral Patterns: Publish/Subscribe⁵⁰
- Day 2
 - Implementation of Publish/Subscribe⁵¹
 - Behavioral Patterns: Mediator⁵²
 - Assignment 11⁵³
- Day 3
 - Introduction to jQuery⁵⁴
- Day 4
 - Lab 5: Continued work on TODOapp⁵⁵

Week 6 (02/09-02/13)

- Day 1
 - Architectural Patterns: Model-View-Controller⁵⁶
- Day 2
 - Implementing a basic MVC⁵⁷
- Day 3
 - Introduction to Backbone⁵⁸
 - Assignment 12⁵⁹
- Day 4
 - Lab 6: Incorporating MVC in TODOapp⁶⁰

⁴⁹[notes/pattern_observer.html](#)

⁵⁰[notes/pattern_pubsub.html](#)

⁵¹[notes/pubsub_implementation.html](#)

⁵²[notes/pattern_mediator.html](#)

⁵³[assignments/11.html](#)

⁵⁴[notes/jquery_intro.html](#)

⁵⁵[labs/5.html](#)

⁵⁶[notes/pattern_mvc.html](#)

⁵⁷[notes/mvc_implement.html](#)

⁵⁸[notes/backbone.html](#)

⁵⁹[assignments/12.html](#)

⁶⁰[labs/6.html](#)

Week 7 (02/16-02/20)

- Day 1
 - Introduction to XMLHttpRequest⁶¹
- Day 2
 - Ajax via jQuery⁶²
- Day 3
- Day 4
 - Lab 7: Introducing data persistence in TODOapp⁶³

Week 8 (02/23-02/27)

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Week 9 (03/02-03/06)

- Day 1
 - Testing with Stubs, Mocks and Spies⁶⁴
- Day 2
 - Module Patterns: Node modules⁶⁵
- Day 3
 - Module Patterns: AMD modules⁶⁶
- Day 4
 - Project proposals

Week 10 (03/09-03/13)

- Day 1
 - Project structure⁶⁷
- Day 2

⁶¹[notes/xhr_intro.html](#)

⁶²[notes/xhr_jquery.html](#)

⁶³[labs/7.html](#)

⁶⁴[notes/test_stubs.html](#)

⁶⁵[notes/pattern_module.html](#)

⁶⁶[notes/pattern_amd.html](#)

⁶⁷[notes/project.html](#)

- Survey of HTML elements⁶⁸
- Day 3
 - Survey of CSS features⁶⁹
- Day 4
 - Lab 8:⁷⁰

Week 11 (03/16-03/20)

- Day 1
 - Using Templates: Handlebars⁷¹
- Day 2
 - Deeper look into Javascript objects⁷²
- Day 3
 - Structural Patterns: Facade⁷³
 - Structural Patterns: Proxy⁷⁴
- Day 4
 - Work on project

Week 12 (03/23-03/27)

- Day 1
 - Introduction to Promises⁷⁵
- Day 2
 - More advanced testing
- Day 3
 - More advanced testing
- Day 4
 - First project submission

⁶⁸[notes/html_survey.html](#)

⁶⁹[notes/css_survey.html](#)

⁷⁰[labs/8.html](#)

⁷¹[notes/templates.html](#)

⁷²[notes/object_deeper.html](#)

⁷³[notes/pattern_facade.html](#)

⁷⁴[notes/pattern_proxy.html](#)

⁷⁵[notes/promises.html](#)

Week 13 (03/30-04/03)

- Day 1
- Day 2
- Day 3
- Day 4

Week 14 (04/06-04/10)

- Day 1
- Day 2
- Day 3
- Day 4