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
 - Assignment 2⁸
- Day 3
 - Basics of Objects⁹
 - Strings and Regular Expressions¹⁰
- Day 4
 - Function basics¹¹
 - Assignment 3¹²
 - Basics of Version Control¹³
 - Git basics¹⁴
 - Review of Git commands¹⁵

¹notes/history.html

²notes/page_components.html

³notes/how_to_run.html

⁴notes/numbers.html

⁵assignments/1.html

⁶notes/local_vs_global.html

⁷notes/array_basics.html

⁸assignments/2.html

⁹notes/object_basics.html

¹⁰notes/strings_and_re.html

¹¹notes/functions_basic.html

¹²assignments/3.html

¹³notes/git_version_control.html

¹⁴notes/git_basics.html

¹⁵notes/git_commands_review.html

Week 2 (01/12-01/16)

- Day 1
 - GitHub basics¹⁶
 - Lab 1: Fork, Pull, Commit, Push¹⁷
 - 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 $loops^{23}$
 - Assignment 5²⁴
- Day 3
 - Methods in objects. Using this 25
 - 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 this 30
 - Introduction to the concept of Design Patterns³¹

¹⁶notes/github_basics.html

¹⁷labs/1.html

¹⁸notes/function_closures.html

¹⁹notes/array_methods.html

²⁰assignments/4.html

²¹notes/functions_for_scope.html

²²notes/function_tricks.html

²³notes/functions_in_loops.html

²⁴assignments/5.html

²⁵notes/object_methods.html

²⁶notes/object_creation_prototypes.html

²⁷assignments/6.html

²⁸notes/test_writing.html

²⁹labs/2.html

³⁰notes/function_calls_and_this.html

³¹notes/design patterns.html

- Day 2
 - Creation Patterns: Constructor³²
 - 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

³²notes/pattern_constructor.html

³³notes/pattern_singleton.html

³⁴notes/pattern mixin.html

³⁵assignments/7.html

³⁶notes/dom_intro.html

³⁷notes/dom tree.html

³⁸assignments/8.html

³⁹notes/data_structures.html

⁴⁰labs/3.html

⁴¹notes/event_intro.html

⁴²notes/event_bubbling.html

⁴³assignments/9.html

⁴⁴notes/event_timers.html

⁴⁵notes/function throttling.html

⁴⁶assignments/10.html

⁴⁷notes/event custom.html

- Day 4
 - Lab 4: Starting on a TODOapp⁴⁸

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

⁴⁸labs/4.html

⁴⁹notes/pattern_observer.html

⁵⁰notes/pattern_pubsub.html

⁵¹notes/pubsub_implementation.html

⁵²notes/pattern_mediator.html

⁵³assignments/11.html

⁵⁴notes/jquery_intro.html

⁵⁵labs/5.html

⁵⁶notes/pattern_mvc.html

⁵⁷notes/mvc_implement.html

⁵⁸notes/backbone.html

⁵⁹assignments/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)

BREAK

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

⁶¹notes/xhr_intro.html

⁶² notes/xhr_jquery.html

⁶³ labs/7.html

⁶⁴notes/test_stubs.html

⁶⁵notes/pattern_module.html

⁶⁶notes/pattern_amd.html

⁶⁷notes/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

⁶⁹notes/css_survey.html

⁷⁰labs/8.html

⁷¹ notes/templates.html

⁷²notes/object_deeper.html

⁷³notes/pattern_facade.html

⁷⁴notes/pattern_proxy.html

⁷⁵notes/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