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 and GitHub basics¹⁴
 - Review of Git commands¹⁵
 - Lab 1: Fork, Pull, Commit, Push¹⁶

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

⁸notes/object_basics.html

⁹assignments/2.html

¹⁰notes/strings_and_re.html

¹¹notes/functions_basic.html

¹²assignments/3.html

¹³notes/git/version_control.html

¹⁴notes/git/git_github_basics.html

¹⁵notes/git/commands_review.html

¹⁶labs/1.html

Week 2 (01/12-01/16)

- Day 1
 - Functions as Closures¹⁷
 - Array Collection methods¹⁸
 - Assignment 4¹⁹
- Day 2
 - Functions as a means for creating a scope/context²⁰
 - Some tricks using functions²¹
 - Functions created in loops²²
 - Assignment 5²³
- Day 3
 - Methods in objects. Using this²⁴
 - Object creation forms. Prototypes²⁵
 - Assignment 6²⁶
- Day 4
 - Writing tests²⁷
 - Lab 2: Node, Testing²⁸

Week 3 (01/19-01/23)

- Day 1
 - Function call forms and the value of this ²⁹
 - Introduction to the concept of Design Patterns³⁰
- Day 2
 - Creation Patterns: Constructor³¹

¹⁷notes/function closures.html

¹⁸notes/array_methods.html

¹⁹assignments/4.html

²⁰notes/functions_for_scope.html

²¹notes/function_tricks.html

²²notes/functions_in_loops.html

²³assignments/5.html

²⁴notes/object_methods.html

²⁵notes/object_creation_prototypes.html

²⁶assignments/6.html

²⁷notes/test_writing.html

²⁸labs/2.html

²⁹notes/function_calls_and_this.html

³⁰notes/design_patterns.html

³¹notes/pattern constructor.html

- Creation Patterns: Singleton³²
- Creation Patterns: Mixins³³
- Assignment 7³⁴
- Day 3
 - Introduction to the DOM (Document Object Model)³⁵
 - Manipulating the DOM tree³⁶
 - Assignment 8³⁷
- Day 4
 - Data Structures in Javascript³⁸
 - Lab 3: Union/Find, Sets³⁹

Week 4 (01/26-01/30)

- Day 1
 - Introduction to DOM Events⁴⁰
 - Bubbling of Events⁴¹
 - Assignment 9⁴²
- Day 2
 - Timers⁴³
 - Function idiom: Throttling⁴⁴
 - Assignment 10⁴⁵
- Day 3
 - A custom Event module⁴⁶
- Day 4
 - Lab 4: Starting on a TODOapp⁴⁷

³²notes/pattern_singleton.html

³³notes/pattern_mixin.html

³⁴assignments/7.html

³⁵notes/dom_intro.html

³⁶notes/dom_tree.html

³⁷assignments/8.html

³⁸notes/data_structures.html

³⁹labs/3.html

 $^{^{40}}$ notes/event_intro.html

⁴¹notes/event_bubbling.html

⁴²assignments/9.html

⁴³notes/event_timers.html

⁴⁴notes/function_throttling.html

⁴⁵assignments/10.html

⁴⁶notes/event_custom.html

⁴⁷labs/4.html

Week 5 (02/02-02/06)

- Day 1
 - Behavioral Patterns: Observer⁴⁸
 - Behavioral Patterns: Publish/Subscribe⁴⁹
- Day 2
 - Implementation of Publish/Subscribe⁵⁰
 - Behavioral Patterns: Mediator⁵¹
 - Assignment 11⁵²
- Day 3
 - Introduction to jQuery⁵³
- Day 4
 - Lab 5: Continued work on TODOapp⁵⁴

Week 6 (02/09-02/13)

- Day 1
 - Architectural Patterns: Model-View-Controller⁵⁵
- Day 2
 - Implementing a basic MVC⁵⁶
- Day 3
 - Introduction to Backbone⁵⁷
 - Assignment 12⁵⁸
- Day 4
 - Lab 6: Incorporating MVC in TODOapp⁵⁹

⁴⁸notes/pattern_observer.html

⁴⁹notes/pattern_pubsub.html

⁵⁰notes/pubsub_implementation.html

⁵¹notes/pattern_mediator.html

⁵²assignments/11.html

⁵³notes/jquery_intro.html

⁵⁴labs/5.html

⁵⁵notes/pattern_mvc.html

⁵⁶notes/mvc_implement.html

⁵⁷notes/backbone.html

⁵⁸assignments/12.html

⁵⁹labs/6.html

Week 7 (02/16-02/20)

- Day 1
 - Introduction to XMLHttpRequest⁶⁰
- Day 2
 - Ajax via jQuery⁶¹
- Day 3
- Day 4
 - Lab 7: Introducing data persistence in TODOapp⁶²

Week 8 (02/23-02/27)

BREAK

Week 9 (03/02-03/06)

- Day 1
 - Testing with Stubs, Mocks and Spies⁶³
- Day 2
 - Module Patterns: Node modules⁶⁴
- Day 3
 - Module Patterns: AMD modules⁶⁵
- Day 4
 - Project proposals

Week 10 (03/09-03/13)

- Day 1
 - Project structure⁶⁶
- Day 2

⁶⁰ notes/xhr_intro.html

⁶¹notes/xhr_jquery.html

⁶² labs/7.html

⁶³notes/test_stubs.html

⁶⁴notes/pattern_module.html

⁶⁵notes/pattern_amd.html

⁶⁶notes/project.html

- Survey of HTML elements⁶⁷
- Day 3
 - Survey of CSS features⁶⁸
- Day 4
 - Lab 8:69

Week 11 (03/16-03/20)

- Day 1
 - Using Templates: Handlebars⁷⁰
- Day 2
 - Deeper look into Javascript objects⁷¹
- Day 3
 - Structural Patterns: Facade⁷²
 - Structural Patterns: Proxy⁷³
- Day 4
 - Work on project

Week 12 (03/23-03/27)

- Day 1
 - Introduction to Promises⁷⁴
- Day 2
 - More advanced testing
- Day 3
 - More advanced testing
- Day 4
 - First project submission

⁶⁷notes/html_survey.html

⁶⁸notes/css_survey.html

⁶⁹labs/8.html

⁷⁰ notes/templates.html

⁷¹notes/object_deeper.html

⁷²notes/pattern_facade.html

⁷³notes/pattern_proxy.html

⁷⁴notes/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