

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

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[assignments/2.html](#)

⁹[notes/object_basics.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/git_commands_review.html](#)

Week 2 (01/12-01/16)

- Day 1
 - GitHub basics¹⁶
 - Remotes and Branches¹⁷
 - GitHub Workflow¹⁸
 - Overall Project Workflow¹⁹
 - Lab 1: Getting used to the basics²⁰
- Day 2
 - Functions as values²¹
 - Functions as closures²²
 - Assignment 4²³
- Day 3
 - Functions as a means for creating a scope/context²⁴
 - Array Collection methods²⁵
 - Assignment 5²⁶
- Day 4
 - Function Usage Patterns²⁷
 - Methods in objects and the need for this²⁸

Week 3 (01/19-01/23)

- Day 1
 - Lab 2: Writing Tests²⁹
- Day 2
 - Function call forms and the value of this³⁰

¹⁶[notes/github_basics.html](#)

¹⁷[notes/git_remotes_branches.html](#)

¹⁸[notes/github_workflow.html](#)

¹⁹[notes/project_workflow.html](#)

²⁰[labs/1.html](#)

²¹[notes/function_values.html](#)

²²[notes/function_closures.html](#)

²³[assignments/4.html](#)

²⁴[notes/functions_for_scope.html](#)

²⁵[notes/array_collection_methods.html](#)

²⁶[assignments/5.html](#)

²⁷[notes/function_usage_patterns.html](#)

²⁸[notes/object_methods.html](#)

²⁹[labs/2.html](#)

³⁰[notes/function_calls_and_this.html](#)

- Object creation and prototypes³¹
- Different stack implementations³²
- EVERYTHING BELOW IS WORK IN PROGRESS
- Object properties³³
- Assignment 6³⁴
- Writing tests³⁵
- Introduction to the concept of Design Patterns³⁶
- Creation Patterns: Constructor³⁷
- Creation Patterns: Singleton³⁸
- Creation Patterns: Mixins³⁹
- Assignment 7⁴⁰
- Day 3
 - Introduction to the DOM (Document Object Model)⁴¹
 - Manipulating the DOM tree⁴²
 - Assignment 8⁴³
- Day 4
 - Data Structures in Javascript⁴⁴
 - Lab 3: Union/Find, Sets⁴⁵

Week 4 (01/26-01/30)

- Day 1
 - Introduction to DOM Events⁴⁶
 - Bubbling of Events⁴⁷
 - Assignment 9⁴⁸
- Day 2

³¹[notes/object_creation_prototypes.html](#)

³²[notes/stack_various.html](#)

³³[notes/object_properties.html](#)

³⁴[assignments/6.html](#)

³⁵[notes/test_writing.html](#)

³⁶[notes/design_patterns.html](#)

³⁷[notes/pattern_constructor.html](#)

³⁸[notes/pattern_singleton.html](#)

³⁹[notes/pattern_mixin.html](#)

⁴⁰[assignments/7.html](#)

⁴¹[notes/dom_intro.html](#)

⁴²[notes/dom_tree.html](#)

⁴³[assignments/8.html](#)

⁴⁴[notes/data_structures.html](#)

⁴⁵[labs/3.html](#)

⁴⁶[notes/event_intro.html](#)

⁴⁷[notes/event_bubbling.html](#)

⁴⁸[assignments/9.html](#)

- Timers⁴⁹
 - Function idiom: Throttling⁵⁰
 - Assignment 10⁵¹
- Day 3
 - A custom Event module⁵²
- Day 4
 - Lab 4: Starting on a TODOapp⁵³

Week 5 (02/02-02/06)

- Day 1
 - Behavioral Patterns: Observer⁵⁴
 - Behavioral Patterns: Publish/Subscribe⁵⁵
- Day 2
 - Implementation of Publish/Subscribe⁵⁶
 - Behavioral Patterns: Mediator⁵⁷
 - Assignment 11⁵⁸
- Day 3
 - Introduction to jQuery⁵⁹
- Day 4
 - Lab 5: Continued work on TODOapp⁶⁰

Week 6 (02/09-02/13)

- Day 1
 - Architectural Patterns: Model-View-Controller⁶¹
- Day 2
 - Implementing a basic MVC⁶²

⁴⁹[notes/event_timers.html](#)

⁵⁰[notes/function_throttling.html](#)

⁵¹[assignments/10.html](#)

⁵²[notes/event_custom.html](#)

⁵³[labs/4.html](#)

⁵⁴[notes/pattern_observer.html](#)

⁵⁵[notes/pattern_pubsub.html](#)

⁵⁶[notes/pubsub_implementation.html](#)

⁵⁷[notes/pattern_mediator.html](#)

⁵⁸[assignments/11.html](#)

⁵⁹[notes/jquery_intro.html](#)

⁶⁰[labs/5.html](#)

⁶¹[notes/pattern_mvc.html](#)

⁶²[notes/mvc_implement.html](#)

- Day 3
 - Introduction to Backbone⁶³
 - Assignment 12⁶⁴
- Day 4
 - Lab 6: Incorporating MVC in TODOapp⁶⁵

Week 7 (02/16-02/20)

- Day 1
 - Introduction to XMLHttpRequest⁶⁶
- Day 2
 - Ajax via jQuery⁶⁷
- Day 3
- Day 4
 - Lab 7: Introducing data persistence in TODOapp⁶⁸

Week 8 (02/23-02/27)

BREAK

Week 9 (03/02-03/06)

- Day 1
 - Testing with Stubs, Mocks and Spies⁶⁹
- Day 2
 - Module Patterns: Node modules⁷⁰
- Day 3
 - Module Patterns: AMD modules⁷¹
- Day 4
 - Project proposals

⁶³[notes/backbone.html](#)

⁶⁴[assignments/12.html](#)

⁶⁵[labs/6.html](#)

⁶⁶[notes/xhr_intro.html](#)

⁶⁷[notes/xhr_jquery.html](#)

⁶⁸[labs/7.html](#)

⁶⁹[notes/test_stubs.html](#)

⁷⁰[notes/pattern_module.html](#)

⁷¹[notes/pattern_amd.html](#)

Week 10 (03/09-03/13)

- Day 1
 - Project structure⁷²
- Day 2
 - Survey of HTML elements⁷³
- Day 3
 - Survey of CSS features⁷⁴
- Day 4
 - Lab 8:⁷⁵

Week 11 (03/16-03/20)

- Day 1
 - Using Templates: Handlebars⁷⁶
- Day 2
 - Deeper look into Javascript objects⁷⁷
- Day 3
 - Structural Patterns: Facade⁷⁸
 - Structural Patterns: Proxy⁷⁹
- Day 4
 - Work on project

Week 12 (03/23-03/27)

- Day 1
 - Introduction to Promises⁸⁰
- Day 2

⁷²[notes/project.html](#)

⁷³[notes/html_survey.html](#)

⁷⁴[notes/css_survey.html](#)

⁷⁵[labs/8.html](#)

⁷⁶[notes/templates.html](#)

⁷⁷[notes/object_deeper.html](#)

⁷⁸[notes/pattern_facade.html](#)

⁷⁹[notes/pattern_proxy.html](#)

⁸⁰[notes/promises.html](#)

- More advanced testing
- Day 3
 - More advanced testing
- Day 4
 - First project submission

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