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
 - Local and Global Variables⁵
 - Basics of Arrays⁶
- Day 2
 - Basics of Objects: Dictionaries⁷
 - Equality in Javascript⁸
 - Strings and Regular Expressions⁹
 - Function basics¹⁰
 - Lab 0¹¹
 - Quiz 1¹²

Week 2 (01/12-01/16)

- Day 1
 - Functions as values¹³
 - Functions as closures¹⁴
- Day 2
 - Functions as a means for creating a scope/context¹⁵

¹notes/history.html

²notes/page_components.html

³notes/how_to_run.html

⁴notes/numbers.html

⁵notes/local_vs_global.html

⁶notes/array_basics.html

⁷notes/object_basics.html

⁸notes/equality.html

⁹notes/strings_and_re.html

¹⁰notes/functions basic.html

¹¹labs/0.html

¹²https://moodle.hanover.edu/mod/quiz/view.php?id=32970

¹³notes/function_values.html

¹⁴notes/function_closures.html

¹⁵notes/functions_for_scope.html

- Array Collection methods¹⁶
- Function Usage Patterns¹⁷
- Quiz 218
- Lab 1¹⁹

Week 3 (01/19-01/23)

- Day 1
 - Overview of Software Development Practices²⁰
 - Basics of Version Control²¹
 - Git basics²²
 - Review of Git commands²³
 - GitHub basics²⁴
- Day 2
 - Remotes and Branches²⁵
 - GitHub Workflow²⁶
 - Overall Project Workflow²⁷
 - Methods in objects and the need for this²⁸
 - Function call forms and the value of this²⁹

Week 4 (01/26-01/30)

- Day 1
 - The DRY principle³⁰
 - Object creation and prototypes³¹
- Day 2
 - Different stack implementations³²

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<sup>16</sup>notes/array collection methods.html
```

¹⁷notes/function usage patterns.html

¹⁸https://moodle.hanover.edu/mod/quiz/view.php?id=33676

¹⁹labs/1.html

²⁰notes/dev_overview.html

²¹notes/git_version_control.html

²²notes/git_basics.html

²³notes/git_commands_review.html

²⁴notes/github_basics.html

²⁵notes/git_remotes_branches.html

²⁶notes/github_workflow.html

²⁷notes/project_workflow.html

²⁸notes/object_methods.html

²⁹notes/function_calls_and_this.html

³⁰notes/dry.html

³¹notes/object_creation_prototypes.html

³²notes/stack_various.html

- "Class" construction examples³³
- Setting up a second remote³⁴
- Testing Basics³⁵

Week 5 (02/02-02/06)

- Day 1
 - Survey of HTML³⁶
 - Survey of CSS³⁷
 - A sample page³⁸
- Day 2
 - Introduction to the DOM (Document Object Model)³⁹
 - Introduction to jQuery⁴⁰

Week 6 (02/09-02/13)

- Day 1
 - Object properties⁴¹
 - Introduction to DOM Events⁴²
 - Timers⁴³
- Day 2
 - TaskApp: Building a Web App⁴⁴

Week 7 (02/16-02/20)

- Day 1
 - TaskApp: Building a Web App⁴⁵
- Day 2
 - TaskApp: Building a Web App⁴⁶

³³notes/class construction.html

³⁴notes/second_remote.html

³⁵notes/testing_basics.html

³⁶notes/html_survey.html

³⁷notes/css_survey.html

³⁸notes/sample_page.html

³⁹notes/dom_intro.html

⁴⁰notes/jquery_intro.html

⁴¹notes/object_properties.html

⁴²notes/events_intro.html

⁴³notes/events_timers.html

⁴⁴notes/taskapp_setup.html

⁴⁵notes/taskapp_setup.html

⁴⁶notes/taskapp_setup.html

Week 8 (02/23-02/27)

BREAK

Week 9 (03/02-03/06)

- Day 1
 - Assignment of Projects⁴⁷
 - Using Templates: Handlebars⁴⁸
- Day 2
 - Work on Projects

Week 10 (03/09-03/13)

- Day 1
 - Graphics in Javascript, SVG⁴⁹
- Day 2
 - Custom Events: Oberver, Publish/Subscribe⁵⁰

Week 11 (03/16-03/20)

- Day 1
 - Documentation systems⁵¹
 - Code Reviews⁵²
- Day 2
 - Module Patterns: Node/CommonJS modules⁵³
 - Using require.js⁵⁴
 - UMD modules⁵⁵

⁴⁷notes/project_descriptions.html

⁴⁸notes/templates.html

⁴⁹notes/graphics.html

⁵⁰notes/custom_events.html

⁵¹notes/documentation.html

⁵²notes/code_review.html

⁵³notes/pattern_modules.html

⁵⁴notes/requirejs.html

⁵⁵notes/umd.html

Week 12 (03/23-03/27)

- Day 1
 - The Visitor Pattern and the need for it⁵⁶
- Day 2
 - Basics of HTTP⁵⁷
 - Introduction to XMLHttpRequest⁵⁸

Week 13 (03/30-04/03)

- Day 1
 - Projects progress
- Day 2
 - Projects progress

Week 14 (04/06-04/10)

- Day 1
 - Projects progress
- Day 2
 - What we left out⁵⁹

Other topics we did not cover

- MVC: Model-View-Controller⁶⁰
- Intro to Patterns: Iterator⁶¹
- Lab 5: Collections⁶²
- Design Patterns⁶³
- Patterns of code reuse⁶⁴
- Pattern: Command⁶⁵

⁵⁶notes/patterns_visitor.html

⁵⁷notes/http_intro.html

⁵⁸notes/xhr_intro.html

⁵⁹notes/left_out.html

⁶⁰notes/pattern_mvc.html

⁶¹notes/patterns_iterator.html

⁶²labs/5.html

⁶³notes/design_patterns.html

⁶⁴notes/code_reuse.html

⁶⁵notes/patterns_command.html

Pattern: Proxy⁶⁶
Pattern: Visitor⁶⁷

• Pattern: Visitor (cont)⁶⁸

Lab 6: Double-Linked Lists, History⁶⁹
Pattern: Composite⁷⁰

Patterns: Adapter and Facade⁷¹
Example of Designing a Model⁷²

⁶⁶notes/patterns_proxy.html 67notes/patterns_visitor.html 68notes/patterns_visitor.html 69labs/6.html

⁷⁰notes/patterns_composite.html

⁷¹ notes/patterns_adapter_facade.html 72 notes/design_example.html