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
 - Survey of HTML³
- Day 2
 - Survey of CSS⁴
 - A sample page⁵
 - Lab 16
- Day 3
 - How to run Javascript⁷
 - Numbers in Javascript⁸
 - Local and Global Variables⁹
 - Basics of Arrays¹⁰

Week 2 (01/12-01/16)

- Day 1
 - Basics of Objects: Object literals¹¹
 - Equality in Javascript¹²
 - Strings and Regular Expressions 13
 - Function basics 14
 - Lab 2¹⁵

¹notes/history.html

²notes/page_components.html

³notes/html_survey.html

⁴notes/css_survey.html

⁵notes/sample_page.html

⁶labs/1.html

⁷notes/how to run.html

⁸notes/numbers.html

⁹notes/local_vs_global.html

¹⁰notes/array_basics.html

¹¹notes/object_basics.html

¹²notes/equality.html

¹³notes/strings_and_re.html

¹⁴notes/functions_basic.html

¹⁵labs/2.html

- Quiz 1¹⁶
- Day 2
 - No class
- Day 3
 - No class

Week 3 (01/19-01/23)

- Day 1
 - Functions as values¹⁷
 - Arrow Functions¹⁸
 - Array Collection methods¹⁹
- Day 2
 - Function Usage Patterns²⁰
 - ES6 Classes²¹
 - Lab 3²²
- Day 3
 - Function call forms and the value of this ²³
 - Introduction to the DOM (Document Object Model)²⁴

Week 4 (01/26-01/30)

- Day 1
 - Introduction to jQuery²⁵
- Day 2
 - Practice with jQuery
- Day 3
 - Introduction to DOM Events²⁶

¹⁶https://moodle.hanover.edu/mod/quiz/view.php?id=15591

¹⁷notes/function values.html

¹⁸notes/function_arrow.html

¹⁹notes/array_collection_methods.html

²⁰notes/function_usage_patterns.html

²¹notes/classes.html

²²labs/3.html

²³notes/function_calls_and_this.html

²⁴notes/dom intro.html

²⁵notes/jquery_intro.html

²⁶notes/events_intro.html

Week 5 (02/02-02/06)

- Day 1
 - Timers²⁷
 - Overview of Software Development Practices²⁸
- Day 2
 - Basics of Version Control²⁹
- Day 3
 - Module Patterns: Node/CommonJS modules³⁰
 - TaskApp: Building a Web App³¹

Week 6 (02/09-02/13)

- Day 1
 - Testing Basics³²
 - TaskApp (cont)³³
- Day 2
 - Custom Events: Observer, Publish/Subscribe³⁴
- Day 3
 - Observer pattern in TaskApp.
 - Boundaries: controller vs UI/view.
 - Test doubles in the controller.

Week 7 (02/16-02/20)

- Day 1
 - ES6 features: String Templates, Symbols
 - ES6 features: Promises
- Day 2
 - Quiz 2³⁵

²⁷notes/events_timers.html

²⁸notes/dev_overview.html

²⁹notes/git_version_control.html

³⁰notes/pattern_modules.html

³¹notes/taskapp_setup.html

³²notes/testing_basics.html

³³notes/taskapp_setup.html

³⁴notes/custom_events.html

³⁵https://moodle.hanover.edu/mod/quiz/view.php?id=33676

- The DRY principle³⁶
- Object properties³⁷
- Different stack implementations³⁸
- Object creation and prototypes³⁹
- "Class" construction examples⁴⁰
- Day 3
 - MIDTERM

Week 8 (02/23-02/27)

BREAK

Week 9 (03/02-03/06)

- Day 1
 - Assignment of Projects⁴¹
 - Using Templates: Handlebars⁴²
- Day 2
 - Work on Projects
- Day 3

Week 10 (03/09-03/13)

- Day 1
 - Graphics in Javascript, SVG⁴³
- Day 2
- Day 3

³⁶notes/dry.html

³⁷notes/object_properties.html

³⁸notes/stack_various.html

³⁹notes/object_creation_prototypes.html

⁴⁰notes/class_construction.html

⁴¹notes/project_descriptions.html

⁴²notes/templates.html

⁴³notes/graphics.html

Week 11 (03/16-03/20)

- Day 1
 - Documentation systems⁴⁴
 - Code Reviews⁴⁵
- Day 2
- Day 3

Week 12 (03/23-03/27)

- Day 1
- Day 2
 - Basics of HTTP⁴⁶
 - Introduction to XMLHttpRequest⁴⁷
- Day 3

Week 13 (03/30-04/03)

- Day 1
 - Projects progress
- Day 2
 - Projects progress
- Day 3

Week 14 (04/06-04/10)

- Day 1
 - Projects progress
- Day 2
 - What we left out⁴⁸
 - Final Study Guide⁴⁹
- Day 3

⁴⁴notes/documentation.html

⁴⁵notes/code_review.html

⁴⁶notes/http_intro.html

⁴⁷notes/xhr_intro.html

⁴⁸notes/left_out.html

⁴⁹notes/final_study_guide.html

Other topics we did not cover

- MVC: Model-View-Controller⁵⁰
- Intro to Patterns: Iterator⁵¹
- Lab 5: Collections⁵²
- Design Patterns⁵³
- Patterns of code reuse⁵⁴
- Pattern: Command⁵⁵
- Pattern: Proxy⁵⁶
- Pattern: Visitor⁵⁷
- Pattern: Visitor (cont)⁵⁸
- Lab 6: Double-Linked Lists, History⁵⁹
- Pattern: Composite⁶⁰
- Patterns: Adapter and Facade⁶¹
- Example of Designing a Model⁶²

Old notes

- Functions as closures⁶³
- Functions as a means for creating a scope/context⁶⁴
- Git basics⁶⁵
- Review of Git commands⁶⁶
- GitHub basics⁶⁷
- Remotes and Branches⁶⁸
- GitHub Workflow⁶⁹
- Overall Project Workflow⁷⁰
- Methods in objects and the need for this 71

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<sup>50</sup>notes/pattern mvc.html
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⁵¹notes/patterns_iterator.html

⁵²labs/5.html

⁵³notes/design_patterns.html

⁵⁴notes/code_reuse.html

⁵⁵notes/patterns_command.html

⁵⁶notes/patterns_proxy.html

⁵⁷notes/patterns_visitor.html

⁵⁸notes/patterns_visitor.html

⁵⁹labs/6.html

⁶⁰notes/patterns_composite.html

⁶¹notes/patterns_adapter_facade.html

⁶²notes/design_example.html

⁶³notes/function closures.html

⁶⁴notes/functions_for_scope.html

⁶⁵notes/git_basics.html

⁶⁶ notes/git_commands_review.html

⁶⁷notes/github_basics.html

⁶⁸notes/git_remotes_branches.html

⁶⁹notes/github workflow.html

⁷⁰notes/project_workflow.html

⁷¹notes/object methods.html

- Setting up a second remote⁷²
 AMD Modules⁷³
 Using require.js⁷⁴
 UMD modules⁷⁵

- ullet The Visitor Pattern and the need for it 76

⁷²notes/second_remote.html
⁷³notes/amd_modules.html
⁷⁴notes/requirejs.html
⁷⁵notes/umd.html

⁷⁶notes/patterns_visitor.html