**COURSE CONTENT FOR jQuery**

**Introduction of jQuery**

1. jQuery semantics
2. More code, less words
3. Why oh why did I use alert() for code examples?
4. Color coding
5. Completely grok jQuery text() before reading this book
6. Code examples

**Core jQuery**

1. Base concept behind jQuery
2. The concept, behind the concept, behind jQuery
3. jQuery requires HTML to run in standards mode or almost-standards mode
4. Waiting on the DOM to be ready
5. Executing jQuery code when the browser window is completely loaded
6. Include all CSS files before including jQuery
7. Using a hosted version of jQuery
8. Executing jQuery code when DOM is parsed without using ready()
9. Grokking jQuery chaining
10. Breaking the chain with destructive methods
11. Using destructive jQuery methods and exiting destruction using end()
12. Aspects of the jQuery function
13. Grokking when the keyword this refers to DOM elements
14. Extracting elements from a wrapper set, using them directly without jQuery
15. Checking to see if the wrapper set is empty
16. Creating an alias by renaming the jQuery object itself
17. Using .each() when implicit iteration is not enough
18. Elements in jQuery wrapper set returned in document order
19. Determining context used by the jQuery function
20. Creating entire DOM structure, including DOM events, in a single chain

**Selecting**

1. Custom jQuery filters can select elements when used alone
2. Grokking the :hidden and :visible filter
3. Using the is() method to return a Boolean value
4. You can pass jQuery more than one selector expression
5. Checking wrapper set .length to determine selection
6. Creating custom filters for selecting elements
7. Differences between filtering by numeric order vs. DOM relationships
8. Selecting elements by id when the value contains meta-characters
9. Stacking selector filters
10. Nesting selector filters
11. Grokking the :nth-child() filter
12. Selecting elements by searching attribute values using regular expressions
13. Difference between selecting direct children vs. all descendants
14. Selecting direct child elements when a context is already set

**Traversing**

1. Difference between find() and filter() methods
2. Passing filter() a function instead of an expression
3. Traversing up the DOM
4. Traversing methods accept CSS expressions as optional arguments

**Manipulation**

1. Creating, operating, and adding HTML on the fly
2. Grokking the index() method
3. Grokking the text() method
4. Update or remove characters using a regular expression
5. Grokking the .contents() method
6. Using remove() does not remove elements from wrapper set

**HTML Forms**

1. Disable/enable form elements
2. How to determine if a form element is disabled or enabled
3. Selecting/clearing a single check box or radio button
4. Selecting/clearing multiple check boxes or radio button inputs
5. Determining if a check box or radio button is selected or cleared
6. How to determine if a form element is hidden
7. Setting/getting the value of an input element
8. Setting/getting the selected option of a select element
9. Setting/getting selected options of a multi-select element
10. Setting/getting text contained within a <textarea>
11. Setting/getting the value attribute of a button element
12. Editing select elements
13. Selecting form elements by type
14. Selecting all form elements

**Events**

1. Not limited to a single ready() event
2. Attaching/removing events using bind() and unbind()
3. Programmatically invoke a specific handler via short event methods
4. jQuery normalizes the event object
5. Event object attributes
6. Event object methods
7. Grokking event namespacing
8. Grokking event delegation
9. Applying event handlers to DOM elements regardless of DOM updates using live()
10. Adding a function to several event handlers
11. Cancel default browser behavior with preventDefault()
12. Cancel event propagation with stopPropagation()
13. Cancelling default behavior and event propagation via return false
14. Create custom events and trigger them via trigger()
15. Cloning events as well as DOM elements
16. Getting X and Y coordinates of the mouse in the viewport
17. Getting X and Y coordinates of the mouse relative to another element

**jQuery and the Web Browser**

1. Disabling the right-click contextual menu
2. Scrolling the browser window

**Plugins**

1. Use the $ alias when constructing a plugin
2. New plugins attach to jQuery.fn object to become jQuery methods
3. Inside a plugin, this is a reference to the current jQuery object
4. Using each() to iterate over the jQuery object and provide a reference to each element in the
5. object using the this keyword
6. Plugin returning jQuery object so jQuery methods or other plugins can be chained after using
7. Plugin
8. Default plugin options
9. Custom plugin options
10. Overwriting default options without altering original plugin code
11. Create elements on the fly, invoke plugins programmatically
12. Providing callbacks and passing context

**Effects**

1. Disable all jQuery effect methods
2. Grokking the stop() animation method
3. Determining if an element is animating using :animated
4. Using show(), hide(), and toggle(), without animation
5. Grokking sequential and nonsequential animations
6. Animate() is the base, low-level abstraction
7. Grokking the jQuery fading methods

**AJAX**

1. The jQuery ajax() function is the lowest-level abstraction
2. jQuery supports cross-domain JSONP
3. Stop a browser from caching XHR requests