

## JavaScript Exam Study Guide

The focus of the exam will be on the correct recall of JavaScript syntax and understanding of how JavaScript code runs. A small bit of jQuery will be included as well.

The exam will be a closed book, closed notes, exam, administered during class. It is a paper and pencil exam. You can expect the exam to have roughly 30 questions. Questions will be worth three points each unless otherwise noted. The exam will have 100 points total.

Some questions will be multiple choice. Some questions will be short answer (that is students answer with one or two words, or a single line of code). Other questions will require the student to write several lines of code. The questions that require students to write several lines of code are typically worth more points than the multiple-choice / short-answer questions.

Remember, JavaScript is a case sensitive language. Spelling and case matter. Likewise, in all code samples, you must assume that "use strict" has been specified.

Here's a list of topics that suggest what you can expect to see on the quiz.

### JavaScript Fundamentals

- Data types: numbers, strings, Booleans.
- What are valid / invalid variable names? How to declare and assign a variable using `let`.
- Math operators: `+`, `-`, `*`, `/`, `%`
- The syntax of the `$( ).val()` statement to get the value from the user.
- The syntax of the `$( ).html()` statement to put data into an HTML tag.
- Print a value to the console using `console.log()`
- Useful functions: `isNaN()`, `parseInt()`, `parseFloat()`
- Comparison operators: `==`, `!=`, `>`, `<`, `>=`, `<=`
- Logical operators: `!`, `&&`, `||`
- The syntax of "if" statements (Such as: "if () {} else if () {} else {}"). This includes the ability to compare variables and/or literal values.
- The syntax of a "for" statement. This includes the use of the "++" operator to add one to a variable. (For example: "i++").
- The basic pattern for expressing a function in JavaScript: `function somename() {};`
- Passing values into a function with parameters and getting a result with `return`.
- Number variables as objects: the `.toFixed()` method.
- The significance of the "use strict" directive.

### jQuery

#### Selectors

`# for ids`

#### Events

`.click()`

#### Methods

`.val()`, `.html()`, `.append()`