

#### **Intro to Ruby Programming**

GoSkills online course syllabus

Skill level Lessons Accredited by

Beginner 41 CPD

Pre-requisites Video duration Estimated study time

No prior experience needed 2h 39m 4h 43m

**Instructor**John Elder

#### Introduction

Course Introduction

What to expect from this course.

Install Sublime and Git Bash

How to install Sublime Text and Git Bash Terminal for your development environment.

Install Ruby
Installing Ruby is easy with RubyInstaller.org

Hello World and c9 Transition
In this lesson we'll create our first Ruby program!

### **Ruby Programming Basics**

5 Comments and Errors

How to comment code and deal with errors.

6 Arithmetic Operators

How to do basic math with Ruby.

7 Floats and Integers

Understanding the difference between floats and integers and when to use each.

Q	Comparison Operators
0	How to compare two or more items with Ruby.

- Variables
  Storing information in variables is easy!
- Assignment Operators

  How to assign items to variables (and other things).
- Getting User Input with Gets
  Allowing the user to interact with your program.
- Conditional Statements

  How to use if/else/elsif statements in Ruby.
- Multiple Conditional Comparison Operators
  Sometimes you need to compare more than two things, here's how.
- 14 String Manipulation

  Modifying a string is simple with these string manipulation tips.

### **Intermediate Ruby Concepts**

- Arrays
  What are arrays and how do we create and use them?
- Multi-Dimensional Arrays

  An array of other arrays is multi-dimensional.
- 17 While Loops
  Using while loops in Ruby.
- 18 Until Loops

  Looping until a condition is met using until loops.

19	For and Each Loops Understanding for and each loops, and when to use them.
20	FizzBuzz!

Fizzbuzz! is a popular interview question/quiz. Let's build it!

- Hashes
  What is a hash, and how do you create and use it?
- Hash Manipulation
  Adding and removing items from a hash.
- 23 Methods
  Understanding methods in Ruby.
- Methods Part 2
  More on methods...
- 25 Random Numbers

  How to generate random numbers with Ruby.

## **Advanced Ruby Concepts**

- 26 Classes
  What is a class and how do we use them?
- 27 Classes Part 2
  More on classes and how to use them.
- 28 Instance Variables
  What is an instance variable and how is it different from a regular variable?
- 29 Class Getters
  What is a getter and how do we use it?

How to create a class setter and why you should.		
Understanding Attr_accessor  Let Ruby create your getters and setters automatically with attr_accessor.		
Class Inheritance Inheriting information from other classes.		
Opening a File  How to open another file in your Ruby file.		
Open a File into an Array We'll learn to output the contents of a file into an array.		
Open File Modes  There are several "modes" for opening files. Learn them all here.		
Write to a File We'll learn to write and append data to a file.		
Adding Third-party Functionality with Gems  How to install and use a third-party gem in your program.		
Fun with Ruby - Build a Math Flashcard Game!		
vith Ruby - Build a Math Flashcard Game!		
with Ruby - Build a Math Flashcard Game!  Building a Flashcard Game  Let's use what we've learned to build a math flashcard game!		

Flashcard Subtraction, Multiplication, Division Methods

How to handle subtraction, multiplication and division flashcards.

**Class Setters** 

# 11 Creating a Menu

Allow the user to choose which type of flashcard game to play with a menu.

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