

Portland Code School

Fall 2013 Session

Ruby on Rails

Hours: 6pm-9pm, Mon/Wed + 1 Saturday per month, 9am-4pm

The idea behind this class will be to take students who are unfamiliar with Ruby -- but either know a different programming language or **have a technical background** -- through an intense 1-month course on the **Ruby language**. After that, we dive into the Rails framework, still building our Ruby skills. The course load will not be light, and is for students who are serious about learning **Ruby on Rails**, which is a pretty complex framework. Students will be expected to spend 2-3 hours studying outside of class for every hour spent in class.

Students will be provided reading materials, Treehouse accounts, and will be given access to the classroom from 9am-5pm M-F, as well as some Saturdays, leaving lots of time for independent and group learning. Students will primarily be working and **learning in groups** of 2-4 people.

The Saturdays that are scheduled learning times (1 Saturday each month) will primarily consist of **career development, portfolio building, and project time**. We will also use Saturdays to introduce students to other technical areas (such as the Sinatra framework, MySQL database language, and using Github), to round out the students' curriculum, and broaden their exposure to web development tools.

Class time will total about **85 hours of class** time over 3 months.

Integrating oneself into the **Portland tech community** is possibly the single best decision a new student can make. Forging connections and friendships by attending tech meetups and events is the best way to do this. We cannot force you to do this, but we will try (in a loving way :)

Another powerful way for developers to put their best foot forward -- and be extra attractive to employers -- is to contribute to open source projects. We will cover best practices and different ways to make this happen.

(See next page for outline of technical skills and topics covered during the session)

General Outline (may change slightly each session):

Week 1: Ruby -- Syntax, MVC architecture, Variables and Operators; IRB
Week 2: Ruby -- Conditionals, Loops, and Iterations
Week 3: Ruby -- Methods and Classes
Week 4: Ruby -- Modules and Writing Tests
Week 5: Rails -- Installation, RubyGems, Routes, Controllers and Views
Week 6: Rails -- Dynamic Content, Templates, Databases, Migrations
Week 7: Rails -- Models, ActiveRecord, Associations
Week 8: Rails -- CRUD, Layouts, Partial
Week 9: Rails -- Forms, Validations, Authentication (Devise)
Week 10: Rails -- Debugging, Deployment, Writing Tests
Week 11: Rails -- REST, APIs, and Writing Tests
Week 12: Final Week -- Finish and Present Projects, Final Exam

NOTE: Saturday lectures and topics are not listed here, as they will be planned based on the students' needs

Technical Areas Covered:

Ruby
Ruby on Rails
RubyGems
Sinatra
MySQL
Github
Command Line
Authentication
REST APIs
Debugging
Writing Tests

Other Topics Covered:

Portfolio and Resumé Development
Getting hired in the Tech Industry
Open Source Projects
Group Projects
Team Building