

# Portland Code School

## Fall 2013 Session

### Ruby on Rails

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

This class is designed for students who either **have a technical background** -- that is, they either know a different programming language or work in the tech industry -- or have been studying Ruby on their own for a while.

The class starts with an intense 1-month refresher 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 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. Also, PCS hosts a happy hour every other Friday at local restaurants to give students a chance to meet outside of class in a social environment.

The Saturdays that are scheduled learning times (1 Saturday each month) will primarily consist of **portfolio development, team building, and 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 in the latter part of the course.

*(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