

Portland Code School

Winter 2014 Session

Ruby on Rails

Hours: 6pm-9pm, Tue/Thurs + some Saturdays 9am-Noon + 1 Saturday per month, 9am-4pm

This class is designed to teach students how **build interactive and dynamic web applications** using Ruby on Rails. We start with an intense 1-month refresher on the **Ruby language**. After that, we dive into the Rails framework, still building our Ruby skills. 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 **team building, portfolio development, and other technical areas** (such as jQuery, GitHub and the Chrome Dev Tools) to round out the students' curriculum, and broaden their exposure to web development tools.

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.

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
SQL
Github
Authentication & Authorization
REST APIs
Debugging
TDD (Test Driven Development)