

<u>Week / Description</u>	<u>Date</u>	<u>Ch</u>	<u>Homework</u>
<b>Syllabus</b>			
1. Basics	2007-10-03	1	Hopefully all in class
installation			
<i>1 click installer - windows</i>			
<i>cygwin - windows</i>			
<i>macports - osx</i>			
<i>tarball - linux/unix/osx</i>			
Editor			
<i>emacs / textmate / vi / scite / e for windows</i>			
Tools			
<i>ri / gem_server, irb, gem</i>			
Resources			
<i>irc, quickref, pickaxe book</i>			
2. Language Summary	2007-10-10	quickref	Basic takehome problems (fizzbang, number guesser)
hello world		2	
invoking methods (go see ri)			
Basic datatypes: string, range, numbers, regexps, symbols		5	
Control flow structures: if/unless/case/loop/while/until		7	
<i>real shallow overview</i>			
3. Testing Concepts & Unit Testing	2007-10-17		see week description
<i>From here on out, the classes and homework will be driven via tests:</i>			
<i>All homework will have impl and tests where the student needs to write tests for the impl and find any possible bugs and write impl for the tests to make them pass. By attacking on both sides, you'll get a better appreciation for TDD and still have real world examples of (buggy) code without tests.</i>			
Testing Basics			
<i>positive vs negative testing. edge case boundaries</i>			
TDD via test/unit		12	
BDD via rspec as an alternative to those who don't grok TDD			
<i>This will just be a glance.</i>			
4. Language in More Detail	2007-10-24		same
Containers: Arrays, Hashes, Files... Enumerable		4	
More control flow		7ish	
Iterators & closures (incl syntax for x in y; break/redo/next/retry)		4	
Exception handling		8	
5. Object-Oriented Programming Concepts	2007-10-31		same
Classes		3	
<i>is-a vs. has-a, instances vs classes</i>			
Methods/messages		6	
Modules		9	
<i>include/extend, when to use vs classes</i>			
Philosophical: do the simplest thing that could possibly work			
6. Playing with Standard Libraries	2007-11-07	28	same
Libraries (find, time, yaml, marshal)			
RubyGems / RAA / rubyforge			
tcp chat server			
7. Projects Week 1: iTunes Data Mining, Inc.	2007-11-14		write tests and impl for iTunes XML data miner
<i>or self-driven project you'd rather.</i>			
8. Projects Week 2: Student Driven	2007-11-24		Pick a project, write tests and impl
Regular Expressions, CSV, Data Mining			
9. Projects Week 3: Extending by playing with Popular Libraries	2007-12-05		extend tests and impl to hit the web
Hpricot - html/xml parser			
Mechanize - web scraper			
10. Playing Well with Others	2007-12-12		none
Working with & contributing to the open-source community			