

CIT 383—Administrative Scripting

Fall 2009
M 6:00-9:30
CA 152

Instructor Information

Name	: James Walden	Office Hours
E-Mail	: waldenj@nku.edu	M 21:30-22:30
Office	: ST 340	T 21:00-22:00
Phone	: (859) 572-5571	any by appt
Web Site	: http://faculty.cs.nku.edu/~waldenj	

Summary

Description : Programming in a dynamically typed language (ruby) with a focus on applications to system administration, including interfacing to operating system and network services and automating common system administration tasks.

Prerequisites : INF 260, CIT 370. Students need to be familiar with the basics of programming and UNIX before taking this class.

Textbooks : Chris Pine, *Learn to Program, 2nd ed.*, Pragmatic Programmers, 2009.

Course Goals

A successful student should be able to

1. Read and understand programs written in the ruby language.
2. Construct portable, secure programs in ruby.
3. Automate common system administration tasks.
4. Write networking scripts that interact with e-mail, web, and directory servers.
5. Write programs to parse common data formats such as CSV, XML, and YAML.

Expectations

As with most university classes, it is expected that to receive an average grade you will need to spend two to three hours out of class working on the course for each hour spent in class. This class is a half-online class that meets 3.5 hours per week and expects another 2.5 hours online per week, so it is expected that you will spend 12 to 18 hours out of class each week reading, studying, and programming. Success in programming is directly linked to regular practice.

You are expected to read the assigned readings and lab assignments before coming to class. Most labs will contain a final program to be completed outside of class. These programs are the best way to practice programming and assess your progress. They are also the best way to study for the tests. While I will collect and grade some of these programs, you need to complete all of them. Students who read the book and complete the in-class labs without doing these programs typically do not pass the class.

While this class introduces a new programming language (ruby), you are expected to remember the basics of programming that you learned in INF 260, including arrays, conditionals, functions, and loops. You are also expected to know how to use the UNIX command line and to understand the basics of system administration that you learned in CIT 370.

Grading

Your grade in the course will be calculated as follows:

		A+ → 93
		A → 90
		B+ → 87
		B → 83
		B- → 80
midterm	20%	C+ → 77
assignments	40%	C → 73
labs	20%	C- → 70
final exam	20%	D+ → 67
		D → 60
		F → 0

There will be a lab given during each class period. All labs must be submitted by the due date. Several major programs will be assigned over the course of the semester. You may be required to demonstrate your labs or major programs in the class session after they are due. The assignment guidelines posted on the course web site describe submission procedures and grading policies, including late assignment policies.

Exams will be given on a PC with the same programming environment that you used during the labs. Exams will contain a few short answer questions and a small number of programming problems. Approximately 80% of the exam grade will be based on the programming problems, with only about 20% of the grade based on the short answer questions. The final exam will cover all the material in the course.

Students with Disabilities

Students with disabilities who require accommodations (Academic adjustments, auxiliary aids or services) for this course must register with the Disability Services Office. Please contact the Disability Service Office immediately in the University Center, Suite 320 or call 859-572-6373 for more information. Verification of your disability is required in the Disability Services Office for you to receive reasonable academic accommodations. Visit our website at <http://www.nku.edu/~disability/>.

Academic Dishonesty

The work that you submit in this course is subject to Northern Kentucky University's Student Honor Code (see <http://www.nku.edu/currentstudents/policies/honorcode.php>.) Issues involving academic dishonesty are taken very seriously by this instructor and are dealt with according to College and Department policy. Academic dishonesty includes but is not limited to:

1. Improper access to evaluation material or records.
2. Submission of material which is not the student's own work.
3. Conduct which interferes with the work or evaluation of other students.

Some specific examples of dishonesty include:

1. Copying from another person, book, magazine, or other electronic or printed media.
2. Obtaining another person's exam answer or answers.
3. Assisting another student in submitting work that is not the student's own.

It is unacceptable to share program code. It is unacceptable to share homework solutions. It is acceptable and often a good idea to talk about program algorithms and homework solution strategies, but it is not acceptable to use the same code or code segments, or to share actual solutions to homework problems. Any act of academic dishonesty will result in a grade of zero (0) for that item for the first occurrence. An automatic F in the course will result for the second offense. This policy holds for homework assignments and programs, as well as for tests. In order to be fair, penalties will be applied to all parties involved regardless of culpability or fault.

Course Calendar and Class Structure

See the course web site, <http://faculty.cs.nku.edu/~waldenj/classes/2009/fall/cit383/> for a current course schedule.

The instructor reserves the right to alter this syllabus if he deems it to be necessary.