

# **Welcome to CS 368!**

**Introductions, Overview, Course  
Mechanics, Resources, &c.**

# **Introductions**

# Section 1 = Perl

(normally in CS 1289)

Tim Cartwright

# Section 2 = Python

Nick LeRoy

## Section 1 = Perl

<http://pages.cs.wisc.edu/~cs368-1/>

## Section 2 = Python

<http://pages.cs.wisc.edu/~cs368-2/>

# **Brief Overview**

## Course Objectives

- Write basic code in Perl or Python
- Solve real-world problems with scripting languages
- Learn *about* scripting languages  
(Python/Perl, Ruby, PHP, JavaScript, ActionScript, ...)

## Why Scripting?

- Fast development
- Easy to understand and change
- Abstracts over low-level details
- Pervasive
- Examples:
  - data munging for science, business, ...
  - glue between other, incompatible apps
  - SpamAssassin
  - Twitter (Ruby on Rails)

## Perl or Python?

- **Common**
  - Similar abstractions
  - Widely available
  - About equally expressive
- **Perl**
  - Older, therefore more existing code
  - Great for processing text
  - Vast, well-tested libraries in one place
- **Python**
  - Newer, cleaner approach
  - Object oriented
  - Becoming very common, esp. in scientific computing



# Course Philosophy

Learn *a new skill*

Learn *by doing*

Learn *to fish*

# **Course Mechanics**

# Homework and Grading

- **Homework**

- every day (except last), 15 total
- short coding assignment
- due by 11:10 a.m. of next class
- no late assignments accepted *at all*

- **Grading**

- credit/no credit
- each assignment given 0, 1, or 2 points
- need 20 points for credit

## Homework Points

<b>Pts</b>	<b>Reason</b>
<b>2</b>	<ul style="list-style-type: none"><li>• turned in on time, AND</li><li>• code runs, AND</li><li>• solution is correct or nearly so, AND</li><li>• demonstrates real effort</li></ul>
<b>1</b>	<ul style="list-style-type: none"><li>• turned in on time, AND</li><li>• partial solution, may not actually run, AND</li><li>• demonstrates at least some effort</li></ul>
<b>0</b>	<ul style="list-style-type: none"><li>• late, OR</li><li>• is plagiarized, OR</li><li>• does not demonstrate any real effort</li></ul>

## **Office Hours**

### **Section 1 (Perl)**

Wednesdays, 10–11 a.m., CS 4265 (Tim's office)

### **Section 2 (Python)**

Tuesdays, 1–2 p.m., CS 4289 (Nick's office)

Other times available by appointment

## Course Books (Python)

- *Learning Python* (3rd Ed.)
- *Python Cookbook* (2nd Ed.)
  
- Available FREE online via MadCat
- Not in the UBS textbook area
- ***If*** you buy them, get newest editions

## Course Books (Perl)

- *Learning Perl* (4th Ed.)
- *Programming Perl* (3rd Ed.)
  
- Available FREE online via MadCat
- Not in the UBS textbook area
- ***If*** you buy them, get newest editions

# How to Run Scripts



## Running Perl

- **Unix/Linux**
  - `perl filename`
  - `chmod 0755 filename`  
`./filename`
- **Mac OS X**
  - use Terminal, same as above
- **Windows**
  - download ActiveState Perl
  - not officially supported in the course

## Running Python

- Use Python 2.5–2.7 (not 3.x)
- **Unix/Linux & Mac OS X** (via Terminal)
  - `python filename`
  - `chmod 0755 filename`  
`./filename`
  - Interactive Python: `python`
- **Windows**
  - download from [python.org](http://python.org)
  - not officially supported in the course

## Homework for Day 1

- Go to section website
- Find syllabus
- Find and read homework
- Run the homework script on your own machine and print the output
- Turn in output tomorrow

## Section 1 = Perl

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## Section 2 = Python

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