CS130 Software Tools

Spring 2011

Professor Chadd Williams
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Chadd Williams

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Office: 202 Strain

Office Hours

T 10-11 am

T 1-2 pm

Th 2-3 pm
F 1-2 pm

or by Appointment

Course Website

- http://zeus.cs.pacificu.edu/chadd/cs130s11
  - Tentative Schedule
    - handouts
    - Assignments
  - Syllabus

Respect!

- Class starts promptly at 4:30pm !
- You: Arrive on time!
- Me: End class on time!

- Turn off your electronic devices!
- Participate! Ask questions!

How to Succeed

- Don’t miss class.
- Take notes
- Practice!

- Start assignments early
- they take longer than you think
- Do as much on your own as possible.

http://static.eway.com/catalog/1/ce05_127973_pfd.jpg

How to Succeed

- Read the assignments carefully and follow all directions
- See me **as soon as possible** about any questions!
- Don't forget that you are at a small school!
  - and you are paying for it!

How to send an effective email

To: chadd@pacificu.edu
From: hall4242@pacificu.edu
Subject: CS130: Formulas

Hi Chadd,
I'm working on the volume assignment
and I'm not sure how to calculate a cube
of a number in Excel. Any hints?

Thanks,
Lesley

Homework #0 (worth 5 points)

- Homework assignment #0

- Fill out the survey on the class schedule
- Bring a printed copy **to my office**

- DUE: By Monday 4pm

- Be prepared to discuss your answers!

Course Overview

- What is Computer Science?

- Why are you here?
  - What do you expect to get out of the course?

Course Overview

- CS130 is a course on the collection of tools and techniques that you will need to help you through your academic career and perhaps even in your own research if you chose that path

- We will cover design, creation, research, data collection, analysis and reporting of data and information for an academic setting

Problem Solving

1. Understanding the problem
2. Reviewing the "knowns"
3. Researching the "unknown"
4. Formulating your strategy and determining (adopting the right method)
5. Doing the work and understanding the data

Some Terminology

Define each of the following and give an example of each:

hardware

software

open source

Tool Selection

Word Processing

- Good for what?

Tool Selection

Spreadsheets

- Good for what?

Tool Selection

Statistical Analysis

- Good for what?

Tool Selection

Presentations

- Good for what?

Key Points

- Understand the task at hand
  - select the appropriate tool

- Understand the tool and its limitations
- Not all tools are created equal and cover all aspects of every problem
- This is true regardless of what the vendor of the tool might tell you

Research Projects

- descriptive
- relational
- causal

Research Methods