



# CS130 Software Tools

Fall 2012

Professor Shereen Khoja

# Prof. Shereen Khoja

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<http://zeus.cs.pacificu.edu/shereen>  
[shereen@pacificu.edu](mailto:shereen@pacificu.edu)

Office: Strain 203C

## Office Hours

M 10:30-11:30am

M 2-3pm

T 2-3pm

W 11:45am-12:45pm

or by Appointment

# Course Website

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- <http://zeus.cs.pacificu.edu/shereen/cs130f12/schedule.html>
- Tentative Schedule
  - handouts
  - Assignments
- Syllabus
- Last day of class is October 10
- Final is on October 15, from 4:45-7:45pm. See me as soon as possible if you have a conflict!

# How to Succeed

Ask Questions!

- Don't miss class
  - Take notes - Get a binder!
  - Practice!
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- 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](http://static.eway.com/catalog/1/ce05_127973_pfd.jpg)

Ask Questions!

# How to Succeed

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- 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!

# Assignments

Ask Questions!

- A series of problems to work
  - Build and Excel Workbook
  - Build an SPSS file
- Where can I work?
  - Marsh LL 12
  - Marsh LL 15
  - Library

Be sure to test your Excel/SPSS in this Lab.

I strongly recommend **against** using Excel on a Mac for your assignments!

The Mac and Windows versions of Excel are not 100% compatible.

# How to send an effective email

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

Hi Shereen,  
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 (5 points)

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- Fill out the survey on the class schedule
- Bring a printed copy to my office
- DUE: By Friday (Aug 31) 3pm
- Be prepared to discuss your answers!



# Course Overview

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

# Course Overview

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- 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

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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

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

hardware

software

open source

# Tool Selection

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## Word Processing

- Good for what?

# Tool Selection

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## Spreadsheets

- Good for what?

# Tool Selection

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## Statistical Analysis

- Good for what?

# Tool Selection

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## Presentations

- Good for what?



# Key Points

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- You must understand the task at hand to select the appropriate tool
- You must understand the tool and its limitations to get the proper results
- 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

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- descriptive
- relational
- causal

# Research Methods

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