

8/23/10

email: crowley@usc.edu

website: <http://scf.usc.edu/~cscit402>

office: SAL 316

office hours: Mon-Thurs,
sometimes on Friday

2 TAs: Andrew Goodney
?

Graders: 6-8 graders

office hours: Fri, Sat, Sun
afternoons

SAL 125

Discussion Board

- hosted by DEN - uscden.net
- login to csci 402
- (Once it's setup) click on
ISI Discussion Board

Using the Discussion Board

DON'T POST SECTIONS OF CODE

DO POST Nachos specific questions

DO POST compile problems

- post entire error msg
- post the line of code causing
the problem

DO POST "high-level" design questions

DO POST humor

Grading

60% 3 exams - 2 midterms; 1 final
• ~~20~~ each 20%

40% 4 projects
• each is 3 weeks
• First project is easiest
• Remaining projects - not so easy
• You will / should spend

15-30 hours per week on
projects

I do not grade on a curve.

90% - 100% A

86% - 90% A-

82 - 86 B+

⋮

How to work the projects

Week 1: Understand the theory
thoroughly
• design is important

Week 2: Start coding
• Iterative programming

Week 3: Remaining code - each partner
and Integrate

All projects are submitted electronically
• using 402submit program

They are due on Sundays
at 11:59:59.9999 pm
• California time

Project Grading

| | |
|-----------|-------|
| Writeup | ~ 20% |
| Comments | ~ 10% |
| Tests | ~ 20% |
| Execution | ~ 50% |

Projects

Are team-based: 2 or 3
students
(not 4)

Register your team- email me

- student "full" name (@least 2)
- USC email

How to get into a group?

- friends
- stay after class
- discussion board
 - remote students

What to ask potential partners?

- grade
- experience in programming
- when can partners work
- remote students
- work habits - methodology

Changing Groups

1. No evicting

- I can

2. One person can leave a group of 3.

- With my permission

3. A 2-person group can split

only if BOTH find a group

- With my permission

4. Late in semester (~ week 12)

- If all partners drop, but you, you can join any group

Nachos Simulator

- written in C/C++
- simulates an OS
- runs on Solaris Unix
- Download Nachos into your Unix account & install it

Nachos Documentation

- Roadmap - high-level
- Student documentation
- Discussion Board

Project Slip Days

- 6 total for semester - per group
- Use up to 4 for a single project
- They are applied by us
- Once no slip days - 20% per day late

- There is about a 1-hour grace period for submissions

The last day to submit a project
is Thursday
- after Thursday is a \emptyset

ITS Submission Limits

100 files
10MB of files) every 30 min

Error message: Disk quota exceeded

Solution: Remove unneeded files

- object files
- temporary edited files

- executable/ core

All we need is your source files

Introduction to Operating Systems

Primary Goal: Make a computer
easier to use
≠ Feature

Problem: OSes must interface
between people on one
side and computer hardware
on the other side

This make OSes complex

Design tradeoffs are necessary

Result (& hope)

The study & practice of OSes
give us more insight in how
a computer works so we write
better applications

What is an OS?

A virtual machine



hide details



create abstraction

Users



Application Programs

Virtual Machine Interface

OS Kernel

Hardware Interface (Device Drivers)

Hardware

5 Major Components to an OS

most time * { CPU Scheduling
File System
Memory Management
Networking - Dist System/ OSes
Security