Welcome to CSE 143

Hal Perkins

University of Washington
Winter 2000

Slides based upon those of Martin Dickey (Spring, Autumn 1999), Jonathan Aldrich (Summer 1999), Hal Perkins (Winter 1999) and previous quarters

1/4/00   A-1

Today's Topics

- Course Overview
- Administrative Information
- Then the fun stuff starts ...
  Introduction To C++

All of these slides are on the web (or will be shortly) and are included in the course packet (more info later)

1/4/00   A-2

Staff

- Teaching Assistants:
  - Joseph Chow
  - Charles Gordon
  - Joseph Hall
  - Ariel Kemp
  - Keunwoo Lee
  - Dan Lloyd
  - William Portnoy
- Consultants:
  - Yes
  - Not as many as for 142

- Instructional Technologist
  - Dan Boren

1/4/00   A-3

Are You Ready?

- 143 is a direct continuation of 142
- Must have a firm grasp of C basics, including functions/parameters, arrays, structs, etc. and terminology.
  - No review!
  - Look at old 142 slides & exams to see if you're ready
- Should be able to read a problem description and organize (design) a program to solve it
  - Should be able to analyze, debug, and test a sizable program
  - Review old 142 assignments

1/4/00   A-4

Can't Get In?

- New spots are likely to open up this week
  - Keep trying
  - No waiting lists, no entry codes
- Until then –
  - You are welcome to attend this week and do assignments, but no guarantees
  - Go to some quiz section tomorrow

1/4/00   A-5

Content Overview

- More advanced programming
  - Using C++
    ```
    Initially not much different from C
    ```
  - Big topics: classes , dynamic memory, recursion
  - Eventually, object-oriented programming
- Software engineering
  - Abstraction, modularity, information hiding, robustness
- Data structures and algorithms
  - Lists, stacks, queues, trees, hash tables
  - Algorithms and their analysis

1/4/00   A-6

Grading

Approximate percentages:
- 5-6 projects   35%
- 2 Midterm exams 15%+15%
- Final exam   25%
- Quizzes & other   10%
  - One (lowest) quiz grade will be dropped

Homework Projects

- Will be substantially more complex than 142
  - More realistic problems, multiple source files, data files
  - Using the Debugger will help!
  - Programs have to work, but just working isn't enough!
- You are expected to do your own work – see the academic misconduct guidelines in the course information pages
- Towards the end of the quarter...
  - Maybe some graphics
  - Maybe a team project
- Deadlines
  - Approximately every two weeks
  - Inflexible! Electronic turnin generally Wednesdays @ 10 pm
  - Many homeworks will have a partial turn-in before the final due date

You've Got Homework!

- Homework 0 due this Wednesday
  - Electronic turnin at 10 pm Wed.
  - Paper receipt due in section Thursday
  - Very simple program – purpose of this assignment is to work out the mechanics of running a C++ program and turning it in.

Tests and Quizzes

- All types of questions: multiple-choice, short answer, programming, etc.
- Quizzes: short, given in quiz section, not-quite-pop, no make-ups.
- Midterm Exams (in sections):
  - #1: Thursday, January 27
  - #2: Thursday, February 17
- Final Exam:
  - **Tuesday, March 14, 2:30 pm, location TBA**
- It will not be possible to give the tests on any other days. Please don't make plans that would keep you from taking the tests.

Textbooks

- Required: Carrano, Helman and Veroff, *Data Abstraction and Problem Solving with C++: Walls and Mirrors,* 2nd ed, Addison-Wesley, 1998.
- Why have a textbook?
  - Explanations
  - Reference
  - Examples
    - Hard to do interesting, extended examples in lecture
- Bookstores have many other C++ books
  - Browse and pick one you like
  - Some suggestions on the Web

Course Packet

- Available at: Professional Copy and Print, 42nd and U. Way (approximately $10.00).
- Contains a draft of the slides
  - Based on previous quarters
- Revised slides will be posted within a (business) day or so after each lecture
  - Printed copies of new or substantially revised slides will be handed out in lecture

Course Web

- **http://www.cs.washington.edu/education/courses/143/CurrentQtr/**
- alias: **http://www.cs.washington.edu/143**
- Contains:
  - Course Information
  - Mailing List Archives
  - Lab & Office Hours, Programming Assignments, Links to Previous Quarters, etc. etc.
- You are expected to know your way around the web!
  ### Check it frequently!

1/4/00   A-13

Mailing Lists & Newgroups

- **cse143-announce@cs**: Class announcements made by staff. REQUIRED READING! Subscribe now and stay subscribed
- **uwash.class.cse143.bboard**: Newsgroup for general discussion and questions
- **cse143-section-<name>@cs**: Section-specific mailing lists for discussion and questions
- **cse143-<platform>@cs**: Platform-specific mailing ists for discussion and questions
- See web page for details
- Archive of mailing lists on web

1/4/00   A-14

Mail Aliases

- **cse143-instructor@cs (or perkins@cs)**: Send mail to instructor
  - Attach a small picture of yourself if you can
- **cse143-staff@cs**: Send mail to instructor, all TAs, and all consultants
  - Best place to ask questions that you don't want to post to the newsgroup

1/4/00   A-15

Office Hours

- Perkins (Sieg 208)
  - Official: MW after class (3:30)
  - Or set up an appointment or drop by
- TA's
  - Times will be announced (not scheduled yet)
  - Feel free to see any TA during their office hours – not just the TA for your section
- Consultants
  - Available in lab; exact hours on web

1/4/00   A-16

C++ Compilers

- Full Support:
  - Microsoft Visual C++ on Windows 95/98/NT
    `Version: MSVC++ 6.0 (5.0 should also be OK)`
  - IPL (Sieg 323) has MSVC++ 6.0
  - Home platforms with MSVC++ 6.0 (or 5.0)
- Partial Support:
  - Other *recent* ANSI C++ compilers
    `Metrowerks CodeWarrior, Borland, etc.`
  - Other OS's: Linix, Unix, Mac, etc.

1/4/00   A-17

What Does Support Mean?

- Full support means we will:
  - Provide sample executables
  - Provide consultant support in IPL (limited hours)
  - Offer advice on systems problems
- Partial support means we will:
  - Help with problems as we can
  - Can't promise that course staff will understand or be able to fix your system
  - Can't promise executables
  - Could be problem with graphics homeworks

1/4/00   A-18

Quiz Sections

- Purposes
  - Quizzes!
  - Discuss, answer questions on material
  - Clarify homework
  - New material presentation
  - Enrichment
- Attendance is expected!
- AA: low background
- AB: high background
- Can informally swap in/out of high/low background sections with permissions of TAs involved. Use STAR for any other section swaps.

1/4/00   A-19

Important

- Students in CSE143 have diverse backgrounds
- The pace is fast
  - Strong advice: don't get behind
- If you are having difficulties -- take advantage of instructor/TA office hours
  - *Early* and often!
- If the course looks too easy:
  - Relax
  - Switch to high-background section (1:30)
  - Study from a harder book
  - Overachieve!

1/4/00   A-20

Class environment

- The goal is to create an environment where all students can successfully learn the material
- Hi/Reg/Lo background quiz sections
- Questions/answers in lecture
  - Participate!
- Discussions/activities in quiz sections
  - Participate!
- Mailing lists
  - Intended for discussions of course material
  - Appropriate use policy: do not send abusive mail or irrelevant mail.

1/4/00   A-21