Welcome to CSE 143

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University of Washington
Summer 2000

Slides based upon those of Martin Dickey (Autumn 1999) and others. Slides to be presented in lectures will not always match those in this course packet.

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Today's Topics

- Course Overview
- Administrative Information

- Then the fun stuff starts...Introduction To C++

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Course Web

- **http:// www.cs.washington.edu/education/courses/143/CurrentQtr/**

- 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!

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Staff

- Teaching Assistants:
  - **Justin Gould**
  - **Keunwoo Lee**
  - **Valentin Kostadinov**
  - **Ken Yasuhara**

- Consultants:

  - Note: not as many as for 142!
- **Instructional Technologist**
  - **Dan Boren**
- **Course Administrator**
  - **Melissa Albin**

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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!
  - Review old 142 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

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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

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Grading

Approximate percentages:

- 5-6 projects   36%
- 2 Midterm exams 14%+14%
- Final exam   25%
- Quizzes and other   11%

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.
- 2 Midterm Exams:
  - #1: Week 3 (July 7)
  - #2: Week 6 (July 28
  - Final Exam: Week 9 (August 18)

- 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 (when?) at: Professional Copy and Print, 42nd and U. Way (about $9.00).
- Contains a draft of the slides
  - Based on previous quarters
- Revised slides will be posted on the Web
  - within a (business) day or so after each lecture

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!
- Towards the end of the quarter...
  - Maybe some graphics
  - Maybe a team project
- Deadlines
  - About every two weeks (after the 1st week)
  - Inflexible!
  - Most homeworks will have a partial turn-in before the final due date

Campus Computers

- Nearest lab is in Mary Gates Hall (MGH)
  - Large "commons" area on main floor
  - 142 consultants will be on duty at times
  - We will shortly be working out procedures for getting help in MGH
- Other labs
  - OUGL (Odegaard Undergraduate Library)
  - …
- "What happened to the IPL we used in 142?"
  - There used to be an Introductory Programming Lab (IPL) in Sieg Hall. It's gone due to the availability of MGH.
  - Eventually, there will be a separate, new IPL in MGH.

Mailing Lists

cse143-announce@cs: Class announcements made by staff. REQUIRED READING! Subscribe now and stay subscribed

uwash.class.cse143.bboard: General discussion and questions

cse143-section-<name>@cs: Section-specific discussion and questions

cse143-<platform>@cs: Platform-specific discussion and questions

- See web page for details
- Archive of mailing lists on web

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Mail Aliases

- **cse143-instructor@cs (or dickey@cs)**: Send mail to instructor
- **cse143-staff@cs**: Send mail to instructor, all TAs, and all consultants

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C++ Compilers

- Full Support:
  - Microsoft Visual C++ on Windows 95/98/NT
    Version: MSVC++ 6.0 (or 5.0, very similar)
  - IPL (Sieg 323) has MSVC++ 6.0
  - Home platforms with MSVC++ 5.0 or 6.0
- Partial Support:
  - Other recent ANSI C++ compilers
    Borland, Symantec, etc.
  - Other OS's: Linix, Unix, Mac, etc.

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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 there will be knowledgeable staff
  - Can't promise executables
  - Could be problem with graphics homeworks   A-16

Quiz Sections

- Purposes
  - Quizzes!
  - Discuss, answer questions on material
  - Clarify homework
  - New material presentation
  - Enrichment
- Attendance is expected!
- AA: low background
- AC: high background

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Important

- Students in CSE143 have diverse backgrounds
- The pace is fast
  - My best 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
  - Help some peers who need help (but don't let them copy!)
  - Study from a harder book
  - Overachieve!

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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
  - Appropriate use policy: do not send abusive mail or irrelevant mail.
- **Relax and have fun!**

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