Welcome to 4003-334 Computer Science 4

Joe Geigel

Plan for this class

• Logistics
  – Syllabus & Ground Rules
  – Student Info Forms / Attendance
• What is this course about?

Logistics

• First things first.
  – Official Course Web site
    • http://www.cs.rit.edu/~cs4
      – Syllabus
      – Schedule
      – Projects / Labs
  – My CS2 Web site
    • http://www.cs.rit.edu/~jmg/cs4
      – Notes from class (including copies of slides)
      – Code discussed in class

Logistics

• Textbooks
  – Teach Yourself C++, 7th Edition by Al Stevens

Logistics

• Other C++ Book Suggestions
  – C++: How To Program by Deitel & Deitel
  – C++ Primer by Lippman & Lajoie
  – Absolute C++ by Savitch
  – Thinking in C++, volumes 1 & 2 (2nd edition) by Eckel
    • This book is freely available on-line
  – The C++ Programming Language by Stroustrup

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• Prerequisite:
  – 4003-233 Computer Science 3
  – Assumes one is fairly comfortable with Java.
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• About Me
  – Joe Geigel
  – Office: 70-3527
  – Office Hours: MTWR 10-11 (or by appt)
  – http://www.cs.rit.edu/~jmg

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• Grading:
  – Four basic course activities:
    • Exams 20%
    • Final Exam 20%
    • Labs 35%
    • Projects 25%
  – Note: Labs / Projects worth more than in CS1-3

Logistics

• Format:
  – Like CS1-3
    • 3 lectures (1 hour each)
    • 1 Lab (2 hours)
  – You’ll need to sign up for both.
  – Lecture instructor is responsible for assigning final grades.

Logistics

• Exams
  – There will be 2 mid-quarter exams:
    • Exam 1: Sept 29th
    • Exam 2: Oct 27th
  – Actual dates subject to change
  – No makeup exams except for extreme circumstances.
  – There will be a final (comprehensive) exam
    • Given during exam week. Date TBD.
    • No makeup exams!

Logistics:

• Labs
  – Hands on programming projects
  – 10 labs/1 per week
  – Labs are due 2 days prior to next lab session
  – You may submit labs as often as you like up to the due date without penalty
  – Please do pre-lab activities before entering lab!

Logistics:

• Lab grading:
  – Labs are scored on a 0-100% basis.
  – These scores are averages amongst all 10 labs
  – Labs are equally weighted!
  – This average is divided by 0.95
    • 5% curve
  – Lab instructor is responsible for assigning lab grades (which will be given to lecture instructors for final grade calculation)
  – Remember: Labs are 35% of your grade
  – There are NO makeup labs
Logistics

• Projects
  – There will be 1 assigned project
    • Larger problem to be solved outside of class and lab
    • More than half the quarter to complete.
    • Series of mini-deadlines.
      – Due dates on schedule are still tentative.
    • Coordinated by lecture instructor
    • Lots more details when projects are handed out

Logistics

• Schedule
  – Posted on SCHEDULE section of Official Course Web site
  – Subject to change, but indicates the best guess as to what will be covered when

• Diary
  – Posted on my CS4 Web site
  – Running list of what was actually covered when
  – Includes links to these slides (in PDF)
  – Updated after each class.

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• A note about e-mail and mycourses
  – E-mail may be sent to entire class for late-breaking announcements.
  – E-mail addresses from mycourses will be used
    • Me@rit.edu
  – PLEASE be sure that the e-mail is forwarded to one you actually read.
    • Don’t know how? Hang around after class.

Logistics

• A note about mycourses
  – mycourses will be used as much as possible
    • Course content (slides, etc) will be posted on mycourses as well as my Web page
    • Important dates
    • Gradebook
  – Mycourses is new…bear with me.

Logistics

• CS Dept Policy of Academic Dishonesty
  – Included in hardcopy syllabus
  – Please read and understand.

• Speaking of student info forms
  – Any questions before I hand them out?

So what is this class all about?

• Goals
  – Life Beyond Java
    • C++ is the language used
    • Not, however, merely a course in C++!!!
  – Development of software design skills
    • Object Oriented
    • Large Software Project
So what is this class all about?

- Life Beyond Java
  - Java
  - C++
  - C
  - Assembly language
  - Computer memory

So what is this class all about

- Topics
  - Design
    - Debugging
    - Testing
  - C++
    - Features and architecture
    - How it differs from Java
    - Pointers / memory management
    - Generic Programming : templates
    - Cross language issues
    - Advanced Topics

For next time

- C++ Nuts and Bolts
  - Introduction to C++

- Questions?