Lecture 1: Course Overview
Kenneth M. Anderson
Object-Oriented Analysis and Design
CSCI 6448 - Spring Semester, 2003

CATECS Announcements
- In-Class Students
  - CATECS has a busy studio schedule
  - Be sure to exit promptly so next class can begin on time
  - Food and Drink are not technically allowed
  - Drinks are tolerated, as long as you keep the studio clean!

Live-Site Students
- Place speakerphone away from the TV and make sure its pointed away from the TV
- If you have connection problems:
  - hang up, wait 15 seconds, then call again
- If your speakerphone has a mute button, make sure to use it when not talking!

Class Participation
- I expect you to participate!
- Questions
  - “Stupid questions” -- No such thing
  - “Clarification questions” -- Please do!
- Discussion
  - “Silent Tomb” -- Not allowed
  - Feel free to interrupt me!
- CATECS students
  - Live-site students (same as above)
  - Tape students (via e-mail)
The Instructor

• Ken Anderson
• Office Hours: ECOT 822
  • Tuesdays and Thursdays, 2 PM - 3 PM
  • Or, send me e-mail to set an appointment
• E-mail
  • <kena@cs.colorado.edu>
• Phone
  • +1.303.492.6003

The Instructor, continued

• Ken Anderson
• Mailing Address
  Dr. Kenneth M. Anderson
  University of Colorado, Boulder
  Department of Computer Science
  430 UCB
  Boulder, CO 80309-0430
• Department FAX
  +1.303.492.2844

The Instructor, Background

• Assistant Professor
  • Tenth semester, taught 6448 in Fall 1998, Spring 2001, and Spring 2002
  • Ph.D. from University of California, Irvine
• Research Topics
  • Open Hypermedia, Software Engineering
  • Information Integration
  • Digital Library Workflow
• Software Experience
  • Six Systems ranging from 30K-60K LOC

Teaching Philosophy

• “sage-on-stage” vs. “guide-at-your-side”
• lecture vs. participation
• Answering questions
  • Sometimes the answer will be “I don’t know!”
• I welcome comments and questions from students!
• Something new
  • class activity sessions
• CATECS: do the activities at home, then fast forward tape
Useful URLs

- CATECS
  - [http://www.colorado.edu/ContinuingEducation/CATECS/](http://www.colorado.edu/ContinuingEducation/CATECS/)
- Computer Science Department
  - [http://www.cs.colorado.edu/](http://www.cs.colorado.edu/)
- Instructor's Homepage
  - [http://www.cs.colorado.edu/users/kena/](http://www.cs.colorado.edu/users/kena/)
- Class Homepage
  - [http://www.cs.colorado.edu/users/kena/classes/6448/s03/](http://www.cs.colorado.edu/users/kena/classes/6448/s03/)

About the Class Website

- You have one continuous homework assignment this semester:
  - Check the class website EVERY day
    - Preferably more than once each day
  - Website will be your source for
    - Class schedule
    - Homework assignments
    - Pointers to class-related information

Prerequisites

- Background in Basic SE Concepts
- Software Systems
- Software Lifecycles
  - Requirements, Design, Implementation, etc.
- Experience with at least one object-oriented programming language
- Note: I will not be teaching object-oriented programming in this class!

Currently-Planned Course Topics

- Analysis (Requirements)
- OO terminology: objects, classes, etc.
- Design Methods
  - Agile methods and Extreme Programming
- Design Patterns
- UML
- Examples of OO Design
  - This is a strength of our textbook: lots of examples!
  - Let me know if you have OO designs that you can share with the class
Course Evaluation

- You will be evaluated based on your work in three categories
  - Homeworks
  - Midterm
  - Final
- Other factors may influence your grade, including class participation, improvement over the semester, etc.

Final 30%
Midterm 30%
Homeworks 40%

Notes on Assignments

- Electronic Submission OK
- Text or Postscript/PDF formats only
- If you send an attachment, make sure your name is on the attachment
- All other formats will be returned ungraded
- Late Penalty
- late assignments will be assessed a 20% late penalty; assignment can be submitted up to one week late

Assignments, continued

- CATECS requires the following information on the first page of all assignments (so do I!)
  - student name, course number, company name (if applicable), assignment name or number
- Unmarked assignments will be returned ungraded

Course Textbooks

- Requirements Analysis and System Design
  - by Leszek A. Maciaszek
  - © 2001
  - Start reading chapters one and two
- The Unified Modeling Language (UML) User Guide
  - by “the three amigos”
  - © 1999
Textbook Roles

- I will be following the material in the first textbook quite closely (for the first half of the semester)
- It has lots of examples!
- Plus supplementing its material with my own to cover some topics in greater depth
- The second textbook is a reference manual to the UML for your own personal use in completing the assignments
- Note: if you use a notation from this book that has not been covered in class, please indicate the page on which this notation appears somewhere in your homework

Class Goals

- Understand the difference between requirements and design
- Practice the distinct modeling of problems and solutions
- Gain an initial familiarity with a particular set of notations for capturing object-oriented

Discussion Point

- Note: the previous slide had very little to say about “object this” or “object that”
- That’s because OO Analysis and Design is just one way to perform requirements and design
- When we talk about OO Analysis and Design, we are in fact addressing an age old problem:
  - How do we get from a set of requirements to a solution that meets those requirements?
  - Fred Brooks (read the Mythical Man-Month if you haven’t) classifies these problems as “essential” difficulties

Homework 1

- (This one’s easy)
- Send me an e-mail describing
  1. your background, including your technical skills
  2. why you are taking this class
  3. what you are hoping to learn
- See the website for complete details