15110: Principles of Computing
Course Overview

Dilsun Kaynar, CMU
January 14, 2013

Students From Different Majors

- Fine Arts
- Basic Sciences
- Engineering
- Psychology
- Business
- Modern Languages
- Others ...

15110 Principles of Computing
Carnegie Mellon University
Why Are You Here?

- Curiosity: find out about computing technology and its many effects on society.
- Professional development: computing skills can make you more successful at work.
- Academic requirement: a computing course is required for your major. Why?
- Intellectual growth: you can learn to think like a computer scientist

Computational Thinking

- Computer science is the study of what can be computed and how to compute it
- When you think like a computer science you will be able to
  - Understand what aspects of a problem are amenable to computation
  - Apply computational strategies such divide and conquer in any domain
  - Recognize an opportunity to use computation in a new domain
  - Ask new questions that were not thought of or dared to ask because of scale, easily addressed computationally
  - Understand the limitations and power of computational tools and techniques
Computer Science is the new Math

-- Christos Papadimitrou

Computational thinking is a fundamental skill for our age.

Course Organization

- Instructors:
  - Dilsun Kaynar and Ananda Gunawardena
- Lectures: Mon/Wed/Fri
  - First section: 2:30 to 3:20
  - Second section: 3:30 to 4:20
- 14 recitation sections meet on Thursday
  - Which one are you in? Where does it meet?
- 22 Course Assistants (CAs) to help you!
Office Hours

• Instructors
  – Ananda Gunawardena: Tuesdays 3:30 – 4:30
  – Dilsun Kaynar: Thursdays 3:30 – 4:30

• Course Assistants (many in the evening)
  – See course Web page for schedules

• Starting this weekend

Resources

• Course web page:
  www.cs.cmu.edu/~15110-s13

• Textbooks:
Resources

• Piazza: course message board

• Additional one-on-one tutoring help available through Academic Development. See their web page.

• Ruby textbooks and other materials available on the Resources page of the course web site.

Assignments

• Written problem sets:
  – Go out on Friday
  – Due next Friday at start of lecture

• Labs: do in recitation; hand in at end.

• Programming assignments:
  – Go out on Wednesday
  – Due next Tuesday night (11:59 PM)
Late Policy

• Assignments must be handed in on time.
  – Late assignments receive a grade of 0.

• We will drop 1 written assignment and 1 programming assignment without penalty (except where noted) – you need to have submitted it.

Exams

• You must take all the exams, at the time they are given.

• No makeups except for extreme circumstances (major illness, death in immediate family, or a university-sanctioned event with documentation and prior permission)
  – 2 Lab Exams (done on the computer)
  – 3 Written Exams
  – Final Exam
Academic Integrity Policy

• University Policy on Cheating and Plagiarism
• Academic Integrity Form
  – On the SYLLABUS page of the class web site.
  – Print it out.
  – Read it.
  – Sign it.
  – Bring it to class on Friday 1/18