

cis15  
advanced programming techniques, using c++  
fall 2007  
lecture # 1.1  
introduction

**topics:**

- (0) introduction to the course
- (1) review of c++
- (2) to do

**instructor:**

- Prof Elizabeth Sklar, [sklar@sci.brooklyn.cuny.edu](mailto:sklar@sci.brooklyn.cuny.edu)

**course web page:**

- <http://www.sci.brooklyn.cuny.edu/~sklar/cis15>

(0) introduction to the course

- about this course
  - gives you more experience with C++
  - introduces advanced concepts, like recursion and object-oriented programming
  - introduces you to UNIX
- topics covered:
  - (I) Fundamentals
  - (II) Classes
  - (III) Specifications and Testing
  - (IV) Pointers and Memory
  - (V) Object-oriented Programming
  - (VI) Recursion
  - (VII) Templates

(0) course structure

- **7 units**
- each unit has:
  - 1-2 **lectures**
  - 1-2 **labs**
  - 1 **assignment**
- the labs will be hands-on sessions using laptops (in here, 4411N)
- your grade =
  - 7 assignments (53% total)
  - attendance (7%)
  - midterm (15%)
  - final (25%)

(1) review of c++.

- what do you remember from cis1.5?
- see review example distributed in class

## (2) to do.

- get a copy of the textbook (C++ by Dissection, by Ira Pohl, published by Addison Wesley, 2001)
- ... and start to read chapter 1
- check out the class web page:  
<http://www.sci.brooklyn.cuny.edu/~sklar/cis15>

## (2) about me.

- undergrad: Barnard, CS major, class of 1985
- 10 years of industry experience working as a scientific and business programmer
- grad school: Brandeis University, PhD 2000
- previous teaching:
  - Monash University, Melbourne, Australia
  - University of Melbourne, Melbourne, Australia
  - Boston College, Massachusetts
  - Columbia University, Fall 2001–Spring 2005
  - Brooklyn College, Fall 2005– ...
- research interests center around educational technologies:
  - artificial intelligence (AI)
  - educational robotics
  - interactive learning systems
  - multiagent simulation

## (2) about you.

- please take out a piece of paper and write down...
  1. your name
  2. your email address (print clearly!)
  3. your class and major OR if you are a non-matriculating student, categorize yourself
  4. your background in computers, if any
  5. why you are taking this course
  6. what you hope to learn here
  7. one sentence about one wonderful thing you did over the summer
- ...and give it to me before you leave