What is CS150?

- CS150 is a programming course
- You will learn
  - Syntax (Grammar)
    - The mechanics of writing programs in C++
  - Design
    - Use logical reasoning,
    - How do I solve a problem with a program?
    - How do I break a problem into smaller, more solvable problems?
- No previous programming skills needed!
Course Schedule

- The online schedule will be accurate and up to date. Any class changes will be reflected immediately online, go get used to using the online schedule
- Contains:
  - Handouts
  - Programming assignments
  - Weekly lab projects

Schedule
How to Succeed in CS150

- Don’t miss class.
  - Take notes
  - Bring book and notes to lab, lecture, and office hours
- Try and read ahead
  - Bring questions to class!
- Start programming assignments early
  - They take much longer than you think
- Do as much on your own as possible.

How to send an effective email

To: ryandi@pacificu.edu
From: smit1234@pacificu.edu
Subject: CS150 - exam question

Hi Doug,
I’m studying for the exam and I ran across switch statements in the reading. Since we did not cover switch statements in class, I was wondering if switch statements could be on the exam?

Thanks,
Lesley
Homework!

- Homework assignment #1
- Fill out the survey on the class web page
- Bring a printed copy to my office
- DUE: By Friday 3pm
- Be prepared to discuss your answers!

Introduction to Computers and Programming

Chapter 1

Interesting Questions?

- What is your definition of a computer?
- What is your definition of Computer Science?
Interesting Questions Cont

- Can computers think?

Program

- Program
  - ??

- Programming language
  - A language used to write programs
  - Examples?

Programming

- Be very specific about what you want the computer to do
- The computer follows directions precisely
- You can't just make stuff up and expect the computer to understand
- On the other hand, sometimes you don't know exactly what you want to do ... try something ... anything ... you can't hurt the computer
Programming Language

- Machine language
  - Zeros and ones
  - CPU dependent

- High level language
  - Instructions look like everyday English (sort of)
  - Each instruction can perform many machine language instructions

C++

- Based on the C programming language

- C++ is a high level programming language

- One of today’s most popular programming languages

- Used extensively in industry

Your First C++ Program

```cpp
#include <iostream>
#include <string>
using namespace std;

int main()
{
  string name;
  cout << "Type your name, then press enter" << endl;
  cin >> name;
  cout << "Hello " << name << "!" << endl;
  return EXIT_SUCCESS;
}
```

Program Output:

Type your name, then press enter
Doug
Hello Doug!
Summary

• Today we have looked at:
  ◦ The syllabus
  ◦ Concept of programming
  ◦ A simple C++ program

• Next time we will:
  ◦ Learn how to write our first C++ program

• Completed sections 1.1 - 1.3 from the book
  ◦ Pages 1-12