Who Owns the Internet?

The House on Wednesday [12/5/12] unanimously passed a Senate resolution introduced by Sens. Claire McCaskill (D-Mo.) and Marco Rubio (R-Fla.) that calls on the U.S. government to oppose United Nations control of the Internet.

1. Basic Introduction
2. Elements of Programs
   – Names, expressions, output, assignment
   – Definite loops
3. Numeric data
   – int vs. float
   – Accumulator loops
   – Rounding
4. Graphics
   – Objects
   – Handling mouse and text input
   – GraphWin and Displaying images
5. Sequences
   – Strings, String manipulation
   – Lists
   – File processing

6. Functions
   – Passing data to/from functions
   – Program structure using functions

7. Decisions
   – if, else, elif

8. Loops
   – While, sentinel loops, nested loops
   – Conversion to/from for loops
   – Boolean operators / algebra
   – Post test loop, loop and a half
9. Simulation
   – Random numbers: float / int
   – Could use math, or Monte Carlo simulation
   – Top-down Design, Unit testing

11. Using lists as arrays
   – List operations
   – Generating statistics from lists
   – 2D array (list of lists)

• Chapter 10, parts of 11 were skipped.
• Next would be OOP and/or algorithmic design.
How did we do?

The goal of this course is to teach science majors how to develop tailored, flexible, and efficient working environments built from small programs (scripts) written in the easy-to-learn, very high-level language Python. The course will focus on examples and applications of relevance to computational science, such as using existing applications and tools, running simulations, data processing, etc.

After the course, students should have:

• An ability to apply computing methods to another non-computing discipline.
• An ability to identify a problem and define the computing requirements appropriate to its solution.