

Outline for May 14, 2007

1. Greetings and felicitations!
 - a. The laboratory for today from 12–3 is *cancelled* for reasons beyond our control. Students in this lab should go to another lab (they are at M3–6, W 12–3, and W 3–6). If that is not possible, please try to work the exercises in an open laboratory, and if you have problems please come see me.
2. How antivirus software works
 - a. Signature scanners
 - b. Heuristic detectors look for code triggered by events, or disk writes bypassing the OS.
 - c. Memory resident monitor for virus actions.
3. Spam
 - a. What is it
 - b. How they find you ... or do they?
4. How antispam software works
 - a. Black list
 - b. Content filtering
 - c. Bayesian filter of content for spam characteristics
 - d. White list
5. How firewalls work
 - a. Block ports
 - b. Packet filtering based on source and destination, and packet patterns.
 - c. Mail filtering
 - d. Security monitoring
6. Cryptography
 - a. Classical ciphers: sharing a key
 - b. Public key ciphers: a public and private key
 - c. Digital signatures
7. Introduction to the Python programming language
 - a. Running the interpreter
 - b. Program that prints “hello world”
 - c. Example of syntax errors
 - d. Comments
 - e. Spaces