Final Topics:

The Final is Thursday Dec. 9th from 3-5pm (Room TBA)

Hardware:

- The important components- CPU, RAM, Storage
- CPU- Instructions, Dual Core, ALU
- ROM, RAM- Instructions/Data, Volatile, RAM vs. Secondary Storage
- Parts of Hard drive
- Types of Computers- Micro, Mainframe, Super
- Input/Output
- Speeding up your computer
- Benchmarks, Overclocking (Hardware → How can I speed up my computer?)
- Green Computing (Social Issues)

Data Representation:

- Bits, Bytes, Words
- Converting to/from Binary
- Different Encoding Types- ASCII, UNICODE, Binary (as a type)
- Color Representation- RGB, Additive, Hex
- Compression- Lossy vs. Lossless

Software:

- System vs. Application SW
- Operating Systems-
  - What do they do?
  - Types of
  - Major OSs (Windows, Mac, Linux)
  - Multitasking
  - GUI
- Application Software/Suites- types of application software
- Software Distribution- Commercial, Open Source, Web Based
- Marketing- Types (single user, site, shareware, freeware)
- Computational Complexity (Software → How Fast Can Computers Run Programs?)
Networking:

- Messages on Networks
- IP Addresses/Domains
- Search Engines
- Cookies
- Cryptography/Encryption
- Data mining
- Online Copyrights
- Email

Class Discussions

- The Web is Dead
- Safe Social Media
- Net Neutrality
- Tech Toy Presentations