## CS 2810 Review

The 2810 exam will cover numeric conversions which include both 16-bit signed integers and 32-bit floating point numbers (IEEE-754 Single Precision). To help you focus your studies, I've put together a list of major ideas that may or may not be on the exam. They are in no particular order.

- The primary components of a computer
- Von Neumann Architecture
- Positional Numbering Systems
- Conversions between Numbering Systems
- Signed Integer (Two's Complement)
- IEEE754 Floating Point
- Character Representation
- Error Detection and Correction
- Digital Circuits
- Busses
- I/O
- Memory Addressing
- Types & Speeds of memory
- Cache Memory
- Cache Management
- Magnetic Disk Technology
- RAID
- Interrupt Vector Table Decoding
- Fat Systems decoding (root and boot sector) -- Decoding key provided.
- MP3 Decoding -- Decoding key provided.
- RISC/CISC
- Registers and busses
- The Intel 8088 Register Set & ISA
- Instruction Processing
- Assembler Programming
- Assembler Instructions