CSE 240: PRINCIPLES in COMPUTER ARCHITECTURE

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1. FUNDAMENTALS of COMPUTER DESIGN

2. INSTRUCTION SET PRINCIPLES

3. PIPELINING

4. ADVANCED PIPELINING and INSTRUCTION LEVEL PARALLELISM
   Instruction Level Parallelism. Dynamic Scheduling. Dynamic Hardware Prediction. Multiple Issue. Compiler Support for Increased ILP. Hardware Support for Increased ILP.

5. MEMORY-HIERARCHY DESIGN
   Caches. Reducing Cache Misses, Miss Penalty, Hit Time. Main Memory. Virtual Memory.