• 2
  – Bitwise operations
  – Integer representations and arithmetic
  – Floating point representations

• 3
  – Machine-Level Code
  – Accessing memory
  – Operators (Logical and Arithmetic)
  – Control
  – Procedures & Stacks
  – Arrays, structures, and Unions

• Gates
  – Simple Circuits
  – Circuit simplifications
  – Simple memory

4
  – Y86
  – HCL
  – SEQ
  – PIPE

• 6
  – Locality
  – Memory Hierarchy
  – Caching
  – Cache-friendly code

5
  – Reducing Loop overhead
  – Loop unrolling
  – Inlining
  – Accumulators & Reassociations