

## Tentative Schedule

August 21 – Administrivia, Intro to assembly and MIPS

August 23 – Registers, memory, basic operations

Lab #1 - “Hello World” in MIPS assembly

August 28 - More MIPS assembly

August 30 – More MIPS assembly, microprogramming

Lab #2 – Capitalizing strings in MIPS

September 4 – Floating point, arithmetic

September 6 – Test #1

Lab #3 – Subroutines and calling conventions (gcd)

September 11 – Performance measurement

September 13 – Datapath

Lab #4 – Capitalizing “re-do”

September 18 – Pipelining, pipelining hazards

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September 20 – Superscalar

Lab #5 - GCD re-do, signed vs. unsigned arithmetic

September 25 – x86 Assembly

September 27 – Review for Test #2

Lab #6 - Compiling to x86 assembly, comparing to MIPS

October 2 – Test #2

October 4 – Caching

Lab #7 – More x86 assembly

October 9 - Caching

Lab – no lab

October 16 - Virtual memory

October 18 – Virtual memory

Lab #8 – TBD

October 23 – Concurrency (including transactional memory systems, coherency protocols)

October 25 – Review for Test #3

Lab #9 – TBD

October 30 – Test #3

November 1 – Storage and networks (Patrick Bridges)

Lab – TBD

November 6 – Storage and networks

November 8 – DMA

Lab – TBD

November 13 – OS-hardware interface, Linux on the x86

November 15 – Specialized processors (Joe K niss)

Lab – TBD

November 20 – Specialized processors

Lab – no lab

November 27 – Test #4

November 29 - Virtualization hardware

Lab – TBD

December 4 – Review for final

December 6 – Review for final

Lab – TBD

Final is Tuesday, 11 December, 7:30 – 9:30 am