For each term, write a clear and complete definition. DO NOT cut-and-paste from any online or print source. All work MUST be written in your own words! All discussions must be in the context of this course – parallel algorithms & processing. Must be typewritten. Single spacing, ½ inch margins, font size 12 or 14. May print on both sides of paper.

[Sect 2.1 – 2.3] – Due Tues., Oct 13
1. Data Dependency
2. Control Dependence
3. Fork operation
4. Join operation
5. Data parallelism
6. Functional decomposition
7. Thread
8. Thread Parallelism
9. Vector Parallelism
10. Masking

[Sect. 2.4.1] Due Thurs., Oct 15
1. Cache Memory
2. Order of Magnitude
3. Functional Unit
4. Cache line (Block)
5. Cache Coherence
6. Virtual Memory
7. Thrashing
8. Page Fault
9. NUMA – Non-uniform Memory Access
10. PRAM – Parallel Random Access Memory model

[Sect. 2.4.2 -- 2.4.4] Due
1. Data Locality
2. Arithmetic Intensity
3. Flynn’s Classifications
4. Array Processor
5. Heterogeneous Computer
6. Shared memory Model
7. Distributed Memory Model
8. GPU
9. Offload
10. Heterogeneous Computing

[Section 2.5 - 2.6]
1. Big Theta
2. Big Omega
3. Deadlock
4. Interleaving
5. Mutual Exclusion
6. Fine-grain locking
7. Temporal locality
8. Spatial Locality
9. Load imbalance
10. Overhead

[Section 2.5]
1. Latency