**Blue Waters Petascale Semester Curriculum v1.0**

**Unit 3: Using a Cluster**

**Lesson 1: Parallel Architecture 1**

**References / Further Reading**

*Developed by Peter J. Hawrylak for the Shodor Education Foundation, Inc.*

Introduction to Parallel Computing at: https://docs.google.com/document/d/1JLUYcCvP1Uhc\_FLVPmVui3muM7HQ72z8PrGunSxkP5o/edit

HPC on a Single Thread available at: http://shodor.org/petascale/materials/UPModules/sipeSingleThreadModule1/

Multithreading and Multiprocessing available at: http://shodor.org/petascale/materials/UPModules/sipeMultithreadingMultiprocessModule2/

Designing and Building Parallel Programs, by Ian Foster, available at: https://www.mcs.anl.gov/~itf/dbpp/



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*Browse and search the full curriculum at*[*http://shodor.org/petascale/materials/semester-curriculum*](http://shodor.org/petascale/materials/semester-curriculum)

*We welcome your improvements! You can submit your proposed changes to this material and the rest of the curriculum in our GitHub repository at*[*https://github.com/shodor-education/petascale-semester-curriculum*](https://github.com/shodor-education/petascale-semester-curriculum)

*We want to hear from you! Please let us know your experiences using this material by sending email to* [*petascale@shodor.org*](mailto:petascale@shodor.org)