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

**Unit 1: Computation Across the Curriculum**

**Lesson 1: Introduction to Parallel Computing**

**References / Further Reading**

*Developed by Beau Christ for the Shodor Education Foundation, Inc.*

<https://www.top500.org>

Chapter 12 of the following reference provides a gentle introduction to HPC and parallel programming for Computational Science:

Angela B. Shiflet and George W. Shiflet. 2014. Introduction to Computational Science: Modeling and Simulation for the Sciences (Second Edition) (2nd. ed.). Princeton University Press, USA.

About Brain Performance in Flops

[https://aiimpacts.org/brain-performance-in-flops/#:~:text=We%20also%20estimate%20that%20the,%E2%80%93%2033.7%20\*%201016%20FLOPS.](https://aiimpacts.org/brain-performance-in-flops/#:~:text=We%20also%20estimate%20that%20the,%E2%80%93%2033.7%20*%201016%20FLOPS.)



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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)