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

**Unit 1: Computation Across the Curriculum**

**Lesson 3: Submitting Jobs and Running Programs**

**Instructor Guide**

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The main objective of this lesson is to introduce students to remote execution of programs. In addition, to familiarize the students with the different types of nodes present in a super computer, namely login and compute nodes. A few point to emphasize:

1. Remind students that there are several options to transfer code from/to the super computer.
2. Familiarize students with the authentication systems present in highly secure environments. Remind students to not share their credentials and to be responsible where they store the OTP devices.
3. The instructor is encouraged to introduce the students to the benefits of multiplexed terminals, two are mentioned in the slides, namely tmux and GNU Screen.
4. The instructor is encouraged to motivate the students to start using revision control systems, or at least start considering these systems for synchronous development of their code.



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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)

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