Introduction to Kamiak
Follow Along

Logging in to Kamiak
Terminal >> New Window (for Windows, Start >> Ubuntu)
ssh your.name@kamiak.wsu.edu

Transferring Files to and from Kamiak

Copy from Kamiak to your laptop
Terminal >> New Window (for Windows, Start >> Ubuntu)
scp -r your.name@kamiak.wsu.edu:/opt/apps/samples/training .
ls -l training

Copy from your laptop to Kamiak
scp -r training your.name@kamiak.wsu.edu:~/

Synchronize
rsync -ravx training/ your.name@kamiak.wsu.edu:~/training

Submitting Batch Jobs to Kamiak

Log into Kamiak
ssh your.name@kamiak.wsu.edu

Setup only for this training
.cd training
  . setup.sh

Create/edit a job script
  cat myJob.sh

Submit the job script
  sbatch myJob.sh  # To test: sbatch --test-only myJob.sh

View the job queue
  squeue -u your.name  # Shows pending and running jobs
  squeue -j jobNumber

See output
  cat myJob*.out
**Cancel the job**

scancel *jobNumber*

**View job history and details**

```
sacct -S 2/25/19 -u *your.name*  # Past job history
scontrol show job *jobNumber*  # Job details
```

**Viewing Information about the Cluster**

**What partitions and nodes are available**

```
sinfo -a | more  # Availability (alloc, idle, mix)
```

**View all running and queued jobs**

```
squeue -a | more  # Queued jobs for all partitions
```

**View node details**

```
scontrol show node cn93  # Amount of memory, cpus, GPUs
```

**Interactive Jobs**

```
idev -N 1 --ntasks-per-node=2 -t 360
module avail
module load python/2.7.15
module list
python -i
    print "Hello World!"
    exit()
srun -I python helloWorld.py
exit
```
Job Arrays

cat jobArray.sh
sbatch jobArray.sh
squeue -u your.name
cat output/myJobArray*.out
scancel jobNumber

Using Available Software on Kamiak

module avail python3 # See available python3 modules
module load python3 # Load latest version
module list # See loaded modules
module unload python3 # Unload a module
module load python3/3.4.3 # Load specific version (recommended)
module list # See loaded modules
module avail # Available modules compatible with compiler
module spider # See all modules
module whatis anaconda3 # See what a module does
module help anaconda3 # See help for a module
which python3 # See that python is in your path
printenv PATH # See effects of loading modules
printenv LD_LIBRARY_PATH

Using Scratch Storage

export myscratch = "$(mkworkspace -q)"
echo $myscratch
export myscratch = "$(mkworkspace -q -b /local)"
echo $myscratch

Getting Help

hpc.wsu.edu Support & Drop-in Hours
hpc.wsu.edu/cheat-sheet User’s Guide / Kamiak Cheat Sheet
hpc.wsu.edu/training/slides
hpc.wsu.edu/training/follow-along