## OSU Center for Genome Research and Biocomputing (CGRB), MCB 599: "Introduction to Unix/Linux" (INX\_U18) "Cheat Sheet": Day 4, Pages: 2, Revision: 2018-07-31, Instructor: Matthew Peterson (matthew@cgrb.oregonstate.edu)

Command/Concept	Usage/Syntax	Description	Example
groups	groups <username></username>	Find out what groups a user is in	groups \$USER
finger	finger <username></username>	Find information about a user or attempt to locate a user by typing in part of their name, e.g., first name, last name	#Your information finger \$USER
Show permissions	<pre>ls -l <file> ls -ld <directory></directory></file></pre>	Show <b>u</b> ser, <b>g</b> roup, and <b>o</b> ther permissions with the 1s long listing (-1)	ls -l /etc/motd ls -ld \$HOME
chmod	chmod <ugo>&lt;+-&gt;<rwx></rwx></ugo>	Add/remove permissions for user, group, and other to a file or directory. Use -R to recursively apply a change.	# Give permission for # other to read chmod o+r todo.txt
chgrp	chgrp <group> <target></target></group>	Change the group of a file or directory only if you are already a member in that group (and have permission to do so on the file or directory).	chgrp inx_u18 todo.txt
\$path shell environment variable	To display: echo \$path	If a program with the executable permission is set on it and it is in your \$path then you can run the command from anywhere on the filesystem. If there's more than one program with the same name in your \$path the first instance found will be executed.	# Show your path echo \$path

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rehash	rehash	If you install a new program into a directory that is in your \$path you need to run rehash to have it be recognized. Otherwise you can logout and log back in to have your \$path recognize the new program. Note: This	Rehash
		is a tcsh specific command.	
where	where <command/>	Displays where a program "lives" and if there is an alias for it in the shell. If it is a shell	# Lives in /bin/ls where ls # Shell built-in
		built-in command, e.g., cd,	where cd
		where will make note of that.	
		<b>Note:</b> This is a tcsh specific command.	
Making (script) files executable with	#!	Scripts, e.g., tcsh, bash, perl, python, all need to start with	# First line of a tcsh script #!/bin/tcsh
"shebang": #!		a #! <path interpreter="" to=""> in their text files in order to work.</path>	<pre># First line of a Perl script #!/usr/bin/perl</pre>
Making (script) files executable with chmod +x	chmod +x <scriptfile></scriptfile>	Scripts, e.g., tcsh, bash, perl, python, all need to be set as executable to run. The filename and extension do not matter.	chmod +x myprog.sh