

CSE278 Introduction to Systems Programming (Systems I)
Department of Computer Science and Software Engineering
Summer 2020

These are the software, text, tools that will be used throughout the semester.

Sl. No.	Items	Description	Remarks
1	VPN	Cisco AnyConnect VPN needed for off campus connectivity https://miamioh.teamdynamix.com/TDClient/1813/Portal/Requests/ServiceDet?ID=9022	For any problem, call IT 513 529 7900
2	Linux Server for the course	os1.csi.miamioh.edu (Designated Linux server) ceclnx01.cec.miamioh.edu (CEC Server)	Use ssh to connect remotely
3	NetBeans 8.2	Download and install from https://netbeans.org/	Be used to Remote Project development
4	C++ Compiler	Download and install from https://cygwin.com/install.html	Make sure to install: gcc, g++, make and gdb utility
5	C++ Standard	Use -std=c++14	We will only use standard 14 always
6	C++ Compilation	g++ -std=c++14 -Wall -g source.cpp -o NameOfExecutable	Default NameOfExecutable is a.out
7	Miami C++ Project	edu-miami-RemoteProject_8_2_2016.nbm	Install the .nbm (NetBean Module) plugin
8	CSE Coding Style Guidelines	https://miamioh.edu/cec/academics/departments/cse/academics/programming-style/index.html	Need to resolve any style errors reported during compilation
9	CODE Plugin	https://code.cec.miamiOH.edu/code	See the video
10	Networking	Need to link the Boost system	-lboost_system
11	Database	Need to link MySQL library	-lmysqlpp
12	Remote Project Dev	Configure Remote C++ Project Development using NetBeans 8.2 <ul style="list-style-type: none"> https://netbeans.org/kb/docs/cnd/remotedev-tutorial.html https://netbeans.org/kb/docs/cnd/remote-modes.html 	Required Reading
13	Textual Interface to Linux	On Mac use built in Terminal & SSH – For Windows install PuTTY & PSCP from: https://www.chiark.greenend.org.uk/~sgtatham/putty/latest.html	
14	Web Application	Need to create public_html folder in the Linux Server of your home directory	Do once
15	File permission	Be used to <i>chmod</i> command	u user g group o Others

16	Frequently used Linux Command	man, ls, cp, mkdir, scp, mv, rm, pwd, cd, diff	Refer to: LinuxIntroduction.pdf Lecture Slides
17	Remote copy	Use scp, tftp (command) Use Cyberduck (Visual Tool)	For Windows, use WinSCP
18	HTML and SQL	Tutorial in www.w3schools.com	Practice HTML and SQL quiz from the site.
19	C++ Text	<p>This is C++ How to 10th edition online:</p> <p>Step 1, I go to https://www.lib.miamioh.edu/ (Links to an external site.) - our library</p> <p>Step 2, search the book name</p> <p>Step 3, click connect t electronic book</p> <p>Then it will send you to safari, you have to wait until it redirects you again to oreily (https://learning.oreilly.com/library/view/c-how-to/9780134448930/?ar (Links to an external site.))</p> <p>OR</p> <p>You can try this link : https://learning.oreilly.com/library/view/c-how-to/9780134448930/?ar (Links to an external site.)</p>	
20	Networking Text	<p>https://learning.oreilly.com/home/ (Links to an external site.)</p> <p>Then in the search bar type "Computer and Communication Networks."</p> <p>It will be the first textbook that comes up and you can just click on it. It may prompt you to type in your miami uniqueID and password.</p>	
21	I/O Redirection	< input redirection > output redirection	Can be used in Linux Shell command prompt
22	Handling Command Line Parameter	argc, argv[]	Different mechanism to handle I/O redirection vs Command Line parameter