

# CSC415 OPERATING SYSTEM PRINCIPLES

## Assignment 6 Copy File

For this assignment you will write a copy program similar to `cp` in Bash. An execution of your program will take two command-line arguments. It should then try to open the file named by the first command-line argument. If successful, it should try to create a file with the name given in the second command-line argument, but without clobbering (deleting) any existing file by that name. If again successful, it should loop through the contents of the first file, writing them to the second file. Finally, it should close both files and print out the total number of bytes copied. Be sure to check for any errors in opening, creating, reading and writing the files, and print an appropriate error message if one is encountered. An execution of your program should look like this:

```
~$ ./mycp file1 file2  
copied 512 bytes
```

Your code should use a buffer with size of 1024 bytes. You should use the low level file I/O API for reading/writing the files (i.e., `open()`, `close()`, `read()` and `write()`). This API is also referred to as the OPEN family of Linux system calls. Use the `printf()` for writing the number of bytes copied.

Name your C file as “mycp”. Submit the source code file to the regular submission link on iLearn.