



Academic Year	2025
Semester	<input type="checkbox"/> Fall <input checked="" type="checkbox"/> Winter <input type="checkbox"/> Summer
Course Code - Name	CSCI 3310 – System Programming
Instructor	Dr. Ghadeer Abdelkader
Assessment	Lab 1
Deadline	Submit during the lab

Submission:

9.

```
• clayton@debian:~/Desktop/SystemsProgramming/Labs/Lab1$ sudo insmod lab1.ko
• clayton@debian:~/Desktop/SystemsProgramming/Labs/Lab1$ sudo lsmod | grep lab1
lab1                16384  0
• clayton@debian:~/Desktop/SystemsProgramming/Labs/Lab1$ sudo rmmod lab1
⊗ clayton@debian:~/Desktop/SystemsProgramming/Labs/Lab1$ sudo lsmod | grep lab1
• clayton@debian:~/Desktop/SystemsProgramming/Labs/Lab1$ sudo dmesg | tail
[ 5663.281475] Cleaning up the Kernel module
[ 5682.675184] Welcome to Systems Programming
```

10.

```c

```
#include<linux/init.h>
```

```
#include<linux/module.h>
```

```
#include<linux/kernel.h>
```

```
MODULE_LICENSE("GPL");
```

```
MODULE_AUTHOR("Clayton:100824037 Zachariah::100783192 Alireza::100812651");
```

```
MODULE_DESCRIPTION("100824037 100783192 100812651: This is Group2's first Kernel module");
```

```
static int __init welcome_function(void)
```

```
{
```

```
printk("Welcome to Systems Programming\n");
```

```
return 0;
```

```
}
```

```
static void __exit cleaning_up_function(void)
```

```
{
```

```
printk("Cleaning up the Kernel module");
```

```
}
```

```
module_init(welcome_function);
```

```
module_exit(cleaning_up_function);
```

```
```
```

```Makefile

```
obj-m += lab1.o
```

```
all:
```

```
make -C /lib/modules/$(shell uname -r)/build M=$(PWD) modules
```

```
clean:
```

```
make -C /lib/modules/$(shell uname -r)/build M=$(PWD) clean
```

```
```
```