Please notice that this information can slightly change in order or content during the semester.

**Main subjects**

* Intro to firewalls
* Firewall implementation
* Virtual machines and virtual networks
* Network tools
* TCP/IP
* Firewall functionality
* Software vulnerabilities
* Linux kernel
* Intro to Kernel Modules
* User-kernel interfaces
* Packet journey through the kernel
* Misc. implementation details in kernel programming
* Application level protocols
* Application-level stateful inspection
* Quick overview of today's firewall capabilities

**Online Resources**

* [Linux Kernel Development](http://it-ebooks.info/book/819/)
* [Linux Device Drivers](http://oreilly.com/openbook/linuxdrive3/book/)

**Assignments**

There will be about 5 "Hands-on" assignments in the following subjects:

* TCP/IP traffic recording and crafting
* Protocol enforcement
* Linux user-kernel interface
* Packet filtering
* Attack protection

**General Rules:**

* Mandatory attendance for all the frontal lectures
* No answers by email
* No extensions for submissions. Each assignment should be completed within 2 weeks
* The workshop will end at the end of the semester. No extension for the final submission after the semester ends