

# Course introduction

## Network Infrastructures

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SAPIENZA  
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- **Instructor details**

- Name: Marco Spaziani Brunella
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- Office (La Sapienza): DIET – Networking Lab
- Office (Tor Vergata): Information Engineering – SDN/NFV Lab
- Office hours: Only on appointment (most of the question will be answered after the lecture)

- **Links:**

- Course main page [▶ Link](#)
- Labs page [▶ Link](#)

On the Labs page you can find contact infos, lecture diary, material (e.g. netkit labs) and some misc stuff. Check it periodically!

# Course Objective

The aim of the course is to give the necessary knowledge to configure and manage LANs & WANs under Unix-like OSs.

You will be faced with problem sets and assignments that resemble very common situations in a system administrator's everyday life.

We will use a framework called Netkit, developed by Uniroma3, which allows to emulate a switching environment under Linux.

In order to take the most out of the course, is strongly recommended to actually write the commands, not just copy & paste.

# Course tentative program

- Linux Introduction
- Netkit Round-Up
- Physical interfaces and MAC addressing
- Static IP addressing & DHCP
- Network debug tools
- Static IP routing & OSPF
- iptables
- SSH
- x509 & VPN
- DNS

# Examination methods

The examination consists in 3 **homeworks** assigned at day  $d$  and due to day  $d + 4$  (96 hours). This deadline is **sharp** (check server time).

The homeworks need to be uploaded to your course upload form → homeworks over emails are ignored.

Up to 25 points, to be completed with the 8 points of the theory exam:

- First homework → 6 points
- Second homework → 6 points + 1 extra point
- Third homework → 10 points + 2 extra points

**Extra points** are related to something not necessarily covered in lectures → use any tool to complete them!

# Class policy

- Personal Computer needed in every lecture
- Regular attendance is essential and expected, although not formally required
- Work groups are allowed, although are strongly discouraged

# Communication disclaimer

I've been, I'm and I'll always be a student, so I know how frustrating is not getting answers to e-mails. But consider that the instructor is:

- M/M/1 Markov chain
- Made by flesh, just like you

As a general rule, I will not answer to single e-mails regarding homeworks in real-time (but in a useful time hopefully).

Great minds think alike, so if you encounter a problem, many of your colleagues will do so.

I will cluster questions and answer on the mailing list → Just wait ☺



# Mailing list

A mailing list is a multicast tool → easy to generate panic

- **How to use the mailing list**

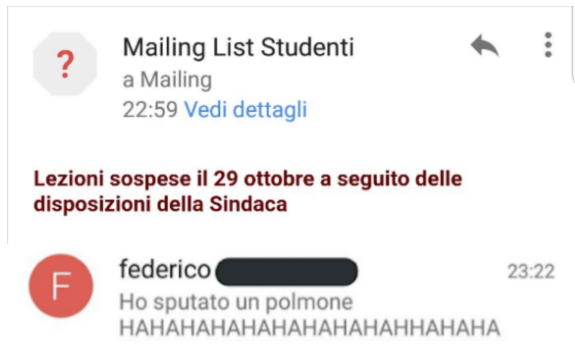
- Logistic problems (e.g. I'm stuck at the metro, You have to be away for university projects, ...)
- Intra-student communications (avoid surveys → use doodles instead)

- **How to NOT use the mailing list**

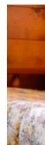
- "I didn't understand the point in the homework where you ask.." → this is called a thread and you should send an e-mail to me
- Answer to someone who asked something related to the homework on the mailing list (you may be wrong, see next slide → panic)

## Lezioni sospese a La Sapienza, gli studenti rispondono alla mail con insulti e bestemmie

Di Futura D'Aprile | 31 Ott. 2018



Altre



VIDEO  
ma a Tc

