

# Operating Systems: Design and Implementation

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**Course:** Paul Irofti

**Laboratory:** Mihai Murgan (BitDefender)

Lab **50 points** – every two weeks

## **Points**

- ▶ **minimum 25** points for exam entry

## **Presence**

- ▶ **mandatory presence** at all labs
- ▶ without attending you can not take the exam
- ▶ if you skip one lab you can retake it in the other week

## **Retakes, reexamination**

- ▶ lab can only be promoted during the semester
- ▶ you can only retake the labs during the first semester during labs hours
- ▶ you can not retake the exam before the reexamination or in the second semester

# Organisation – Exam

- ▶ Exam 50 points – **minimum 25** points to pass
- ▶ you have to write and present a survey paper
- ▶ the paper has to have at least 4 pages double-columned
- ▶ papers are elaborated in teams of maximum 3 students
- ▶ paper LaTeX template can be found on [Overleaf](#)

- ▶ Virtual Machines
- ▶ Buffer Overflow
- ▶ Return-to-libc Attacks
- ▶ Address Space Layout Randomization
- ▶ Return Oriented Programming
- ▶ Timing Attacks
- ▶ Cache Attacks
- ▶ Meltdown and Spectre Attack
- ▶ Rowhammer Attacks
- ▶ Statistical clock drivers
- ▶ Functional Correctness and Security Proofs: seL4 and Genode

Enjoy and happy hacking!

Questions?