

Politecnico di Torino

April 2019

Operations Research: theory and applications to networking

Lesson 0 - Introduction to the Lab

Emilio Leonardi

CCNE+ICT

Outline

Presentation

Goals

Structure

Evaluation

Organization of Final Report

Action Points

Presentation

The lab supports and complements what you learn in the classroom

Applications of operational research concepts to specific telecommunication networks problems.

Part of the exam mark will be obtained by taking part to lab activities.

Goals

Bring real world examples where optimization is applied to telecommunication networks

Learn how to solve optimization problems through a mathematical formulation

Solve the problems with optimization tools

Analyze the quality of results

Improve the final solution

Structure

When: Friday 11:30-13:00

Place: LADISPE (close to Aula 16)

Students will work in groups composed by 3-4 people

Each group is required to attend the lab

- Lab attendance is HIGHLY recommended

Several problems will be discussed

Every group will solve the problem using a PC of the LADISPE

Evaluation

The lab weight is around 30% of the final mark

- please, take seriously the Lab part

The evaluation of the lab is based on a final report

Each group is required to submit the report BEFORE the end of the course

- Submission through “Portale della Didattica”, section “Elaborati”

Deadline: Sunday 30th June 2019 – 23:59

- HARD Deadline
- No extensions will be given

Suggestion: prepare the Lab report gradually

- start writing the report at the end of each lab

Evaluation (II)

Reports received after the deadline will not be corrected (their grade will be 0/30).

Students belonging to different groups are not allowed to share lab report

- In case a report is copied from another report (program, results), both reports will be automatically graded as 0/30.

The required format for the report is PDF

- NO .jpeg, NO Word
- Only electronic format; NO hard copy
- You can use PrimoPDF to convert the file in PDF format

Once the report is submitted to the “Portale”, please check that the uploaded file is the right one

- Please change the file name at each upload

Organization of final report

Put in the lab report the solution of the exercises...

... and the code written to solve the problem

Put a front page listing the lab title, the group number and the group members

- *Name Surname (student id)*

Do not put too much information

- Please answer only to the questions reported in the exercises

- Brevity & Clarity will be appreciated

Action Points

Form groups of 3-4 people

Students are asked to define their group by directly editing the document

https://docs.google.com/document/d/1A15nChy1qHov_xbX7AlWJX2rlcfxlXLAF2J1zEOn-yU/edit

[cut&paste the link into a browser window]

- Pick the first group number not already used and assign it to your group members
- Pay attention to not change others choices

Deadline for sending the group list

- Friday, April 12-th

After such deadline groups for the remaining people will be automatically created

Questions?

