



POLITECNICO
MILANO 1863

ADVANCED ENVIRONMENTAL SYSTEMS ANALYSIS **(1st MOD) 2023/24 – prof. G. Guariso**

Homework rules

As indicated in the course syllabus, there will be two types of homework:

- 1) A paper to read and present
- 2) A numerical exercise to solve using a PC.

The rules to complete this homework are explained below.

1) PAPER PRESENTATION

WHO - Two students working together (learning how to cooperate is important).

WHAT - A technical paper, assigned by the teacher, must be read and summarized to the class by *at most 10 PowerPoint slides and exactly 8 minutes* of oral presentation, possibly followed by 2 minutes of questions from the audience.

The slides must be in English, but the presentation may be in Italian. Two students must split the available time. The presentation must be organized as follows:

- Definition of the problem domain
- Aim of the study
- Solution procedure (omitting all mathematical details)
- Results
- Strength and weakness of the paper.

WHEN – December 13, 2023, room 25.1.1.

WHY - To recognize the style and content of a technical paper. To practice with short presentations. To show the variety of applications of environmental models.

2) NUMERICAL EXERCISE

WHO – Two students working together.

WHAT - Solve numerically, using any software, a problem proposed by the teacher.

Send a short report of *at most 4 pages* and the file(s) implementing the calculation to giorgio.guariso@polimi.it.

The report (in Italian or English) must include:

- a description of the solution procedure, and
- sample results with related comments.

WHEN - At least one week before the publication of the final marks (which means, also in July or September).

WHY - To understand the problems of actual implementations. To become familiar with numerical procedures.

Access and download your homework at <https://tinyurl.com/AESA1-hw23>

When sending emails, please always put “AESA” in the subject and check the “Return receipt” option.