

# Reports Guidelines

Metaheuristique pour l'optimisation

2019

## 1 Introduction

Generally every one/two weeks a document with the instructions for a new report will be uploaded on Moodle. For each exercise, you will have to implement a method described during the class and submit a report with an original description of the results obtained with your code. The weight of each exercise for the final mark average will be proportional to the available time to complete it (i.e. two weeks assignments will count as two one week assignments). The final grade on this practical part of the course will account for  $\frac{1}{3}$  of the final mark.

## 2 Reports

### 2.1 Submissions

You are requested to submit your reports before the specified deadline. Your submission must include:

1. your report in **.pdf** format;
2. your code (in a folder if you have multiple files)

The accepted programming languages are **C**, **C++**, **python**, **java**, **matlab**. If you choose a compiled language, your code should be easy to compile. You can write your report either in **English** or **French**. Do not zip your files before the upload on Moodle.

### 2.2 External libraries

You are only allowed to use standard and general purpose libraries (*e.g.* numpy, matplotlib, std libraries). You must not use libraries that are related to optimization or metaheuristics.

### 2.3 Report structure

Your report should be organized in sections. An example of the sections that you could include in your report is:

1. Title
2. Theory and Methods: be brief, but report all the important aspects of the method that are needed to understand results, conclusions and the algorithm (try to summarize it with a diagram or pseudocode)
3. Results: present the results obtained with your code with tables and figures
4. Discussion: the discussion should be based on your results, do not assert things that you can not prove
5. Conclusions
6. References

In any case, every report must always contain *title, student name, brief method description and result discussion*. Do not discuss in details your code, but focus on the keys features of the method, your results and how they relate to the theory. You are strongly encouraged to use LaTeX to create your report.

## 2.4 Figure and tables

Each figure must have a caption (it should be self-consistent) and a number. The images and tables need to have:

1. names of the axes or row/columns
2. units near all quantities (*e.g.* [timestep], [m], [s])
3. the right axes scale (*e.g.* linear or logarithmic)