# Modelling of Biological Processes-Installation instructions

This document describes two options to install the programming environment for the workshop. The easier option (**option 1**) is to install Python and all the required libraries within it. The other option (**option 2**) is installing a virtual environment through Python and Anaconda.

Please contact me if you encounter any problems (miha.moskon@fri.uni-lj.si).

## **Option 1: Installation in Python**

## 1) Install Python

You can download python from <a href="https://www.python.org/">https://www.python.org/</a>. Download and run the installation file. During the install, select the option Add python.exe to PATH.



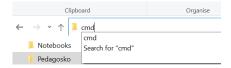
#### 2) Install git

You can download git from https://git-scm.com/. Run the installation after download.

#### 3) Open the console in your working directory

#### In Windows:

**Option 1**: Open the working directory (the folder in which you will be saving workshop files) in your file explorer. Write *cmd* in the address bar and press enter.



**Option 2**: Click on start menu and write *cmd*. Change the folder into your working directory using the command *cd*.

All the following steps contain commands to be typed into the console.

## 4) Download the files for the workshop

> git clone https://github.com/mmoskon/BioMed2425/

#### 5) Go into the downloaded folder

> cd BioMed2425

## 6) Install the required packages

> pip install -r requirements.txt

## 7) Run the Juypter Lab / Notebook

You can use either Jupyter Lab:

> jupyter lab

## or Jupyter Notebook:

> jupyter notebook

Your default browser will open an interface to work with IPython Notebook (.ipynb) files.

## Option 2: installation within a virtual environment in Anaconda

#### 1) Install Anaconda

Download Anaconda from <a href="https://www.anaconda.com/">https://www.anaconda.com/</a>. Run the installation after the download.

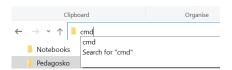
#### 2) Install git

Download git from <a href="https://git-scm.com/">https://git-scm.com/</a>. Run the installation after the download.

#### 3) Open the console in your working directory

#### In Windows:

**Option 1**: Open the working directory in your file explorer. Write *cmd* in the address bar and press enter.



**Option 2**: Click on start menu and write *cmd*. Change the folder into your working directory using the command *cd*.

# 4) All the following steps contain commands to be typed into the console. Download the files for the workshop

> git clone https://github.com/mmoskon/BioMed2425/

#### 5) Go into the downloaded folder

> cd BioMed2425

### 6) Install the virtual environment

> conda create --name metabolic python=3.12.2

## 7) Activate the virtual environment

> conda activate metabolic

## 8) Install the required packages

> pip install -r requirements.txt

## 9) Install the virtual environment in *Jupyter*

> python -m ipykernel install --user --name=metabolic

## 10) Run the Juypter Lab / Notebook

One option is to use Jupyter lab

> jupyter lab

You can also use Jupyter Notebook

> jupyter notebook

Your default browser will open an interface to work with IPython Notebook (ipynb) files.

## 11) Remove the virtual environment

If you will not be using the created virtual environment after the workshop, you can remove it with

- > conda deactivate
- > conda remove --name metabolic --all
- > jupyter kernelspec uninstall metabolic