## Index

March 24, 2017

# 1 ScPo-CompEcon CoursePack

#### 1.1 Content

This website contains the course material for the computational economics course at Sciences Po. For the assosciated homeworks, please go to our github organization, which lists all of them. Instructions contained within.

I recommend you clone this somewhere on your computer (don't install as a julia package). You can do this easily in Github Desktop as in the first homework. Choose a suitable location on your computer. Alternatively, in your terminal, do this:

```
git clone https://github.com/ScPo-CompEcon/CoursePack /whereto/on/your/computer
```

This way you have all the materials locally and can use the site even if offline.

#### 1.2 Course Materials

You can look at the material in a variety of formats. All content is given as IJulia notebooks, which you can edit on your computer, and from those notebooks I create html rendered versions, pdfs and html slides. The link below point to the actual website, so in case you are offline, just go to /whereto/on/your/computer and open files from that location. For example, to open the IJulia notebooks, do in julia

```
Pkg.add("IJulia") # use once to install IJulia
using IJulia
notebook(dir="/whereto/on/your/computer/Notebooks") # that's the dir from above!
```

This will open up the Jupyter notebook at the location of your notebooks

### 1.2.1 Html Rendered Notebooks

Basic Introduction to Julia
Basic Introduction to Computing
Numerical Integration
Plots.jl
Function Approximation
Unconstrained Optimization

#### 1.2.2 Slides

Basic Introduction to Julia
Basic Introduction to Computing
Plots.jl
Numerical Integration
Function Approximation
Unconstrained Optimization

## 1.2.3 Pdf (does not contain plots!)

Basic Introduction to Julia
Basic Introduction to Computing
Plots.jl
Numerical Integration
Function Approximation
Unconstrained Optimization

## 1.3 Required Packages

Please have all of those installed. This list will be updated!

- Plots.jl
- PyPlot.jl
- PlotlyJS.jl
- ScPoExample.jl
- Gallium.jl
- Logging.jl
- DataFrames.jl
- DataFramesMeta.jl
- Queries.jl
- ForwardDiff.jl
- FastGaussQuadrature.jl
- Sobol.jl
- ApproxFun.jl
- Interpolations.jl
- ApproXD.jl
- Optim.jl

#### 1.4 How to build this

You should only worry about this section if you want to rebuild the site yourself.

## Requirements

```
#python
#latex
#ruby
pip install jupyter
pip install pandoc
```

# **Building** in the root of this repo do

```
rake # builds all
rake html # builds only html
rake slides # builds slides
rake offline # builds offline slides; mathjax doesn't work properly offline.
```