

Intermediate statistics: introduction

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Introductions: What are you planning
to do with statistical models?

Before we begin

Remember: All models are wrong, some are useful.

https://f-edwards.github.io/intermediate_stats/

Set up and workflow basics

1. Install R

cran.r-project.org

2. Install RStudio

posit.co/download/rstudio-desktop/

3. Install git and clone course repo (optional)

0. Create a new folder on your HDD called `intermediate_stats`.
Create an RProject located in that folder
1. Create a new script called `1_intro_demo.r`
2. Install packages tidyverse and gapminder using
`install.packages`

Lab 1

Exploring the gapminder data

1. Compute the life expectancy for the average country for each year available in gapminder. Plot your findings.
2. Compute the global average life expectancy for each year. Plot your findings. Compare with 1)
3. Repeat 3; but compute this measure at the year-continent level. Plot your findings.
4. Scatterplot lifeExp and gdpPercap.
5. Scatterplot lifeExp and the logarithm of gdpPercap. Compare with 4.
6. Estimate a linear regression for lifeExp as a function of log GDP. Interpret your findings.