

## Introduction to data science

**Lectures:** Wednesdays 10:15-13:00 (23.02.2022-01.06.2022)

**Location:** R.103 - Abram-Louis-Breguet 2

**ECTS credits:** 3

**Instructor:** Steven Moran <steven.moran@unine.ch>

**Office:** Rue Emile-Argand 11, G B35

**Office hours:** by appointment via email

**Course summary:** The basic principles and methods of data science will be presented. A central theme is the assessment of scientific claims, and subsequent data collection, transformation, quantitative analysis, and reporting of scientific results. See also:

[http://www10.unine.ch/desc\\_data/plans2021-2022/plan\\_2021-2022\\_2LN2319.pdf](http://www10.unine.ch/desc_data/plans2021-2022/plan_2021-2022_2LN2319.pdf)

**Form of assessment:** Continuous assessment with data science exercises (graded). Work not submitted by the required deadline will result in a fail for that given assessment.

**Form of education:** Readings, lectures, methods and data practicals.

**Course structure:** The readings will include chapters from: Calling Bullshit: The Art of Skepticism in a Data-Driven World, by Carl Bergstrom and Jevin West. Lectures and practicals will be given in class. Homework will include courses from DataCamp. Practicals will include R and R markdown reports for each lecture in which students implement the methods learned in code on datasets of their own interest.

**Grading:** 70% data reports in GitHub. 30% presentation of reading chapters (to be divided amongst the students). Homework in DataCamp is pass / fail.

**Syllabus:** This syllabus is **subject to change** but the most up-to-date version is available online.