

Data Science

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Data Science – 14X026

Teaching:

- Stephane Marchand-Maillet
- Sviatoslav Voloshynovskyy

Assistants:

- Mariia Drozdova and Yury Pelousov

Lectures and Labs on **Moodle** (moodle.unige.ch)

Schedule

- Cours: Tuesday 14-16 – Room 316
- Labs: Tuesday 16-18 – Room 316

Documentation

Site Web (Moodle):

- <https://moodle.unige.ch/course/view.php?id=1143>
- Course material
- Documents
- TPs / Labs

Reference books (cf Library):

→ Cf Some pointers during lectures and labs

Lectures and Evaluation

- Lectures
 - Presentations, handwriting on slides and recorded
 - Labs as practical projects over 1 or 2 weeks
- Evaluation
 - Evaluation of Labs
 - Exam: Oral at the end of semester (Feb/Sept)
 - May include questions related to labs

Contents

Data Science

- High Dimensional spaces
- Data analysis and modeling
 - PCA, LDA, *k-means*, Temporal models,...
- Data processing and understanding
 - Hypothesis testing
 - Estimation: ML, MAP, MMSE