Carl von Ossietzky
Universität
Oldenburg

# Introduction to psy126

## Creating your own Jupiter Notebook

Leonardo Zaggia
09.04.25 – 10.04.25

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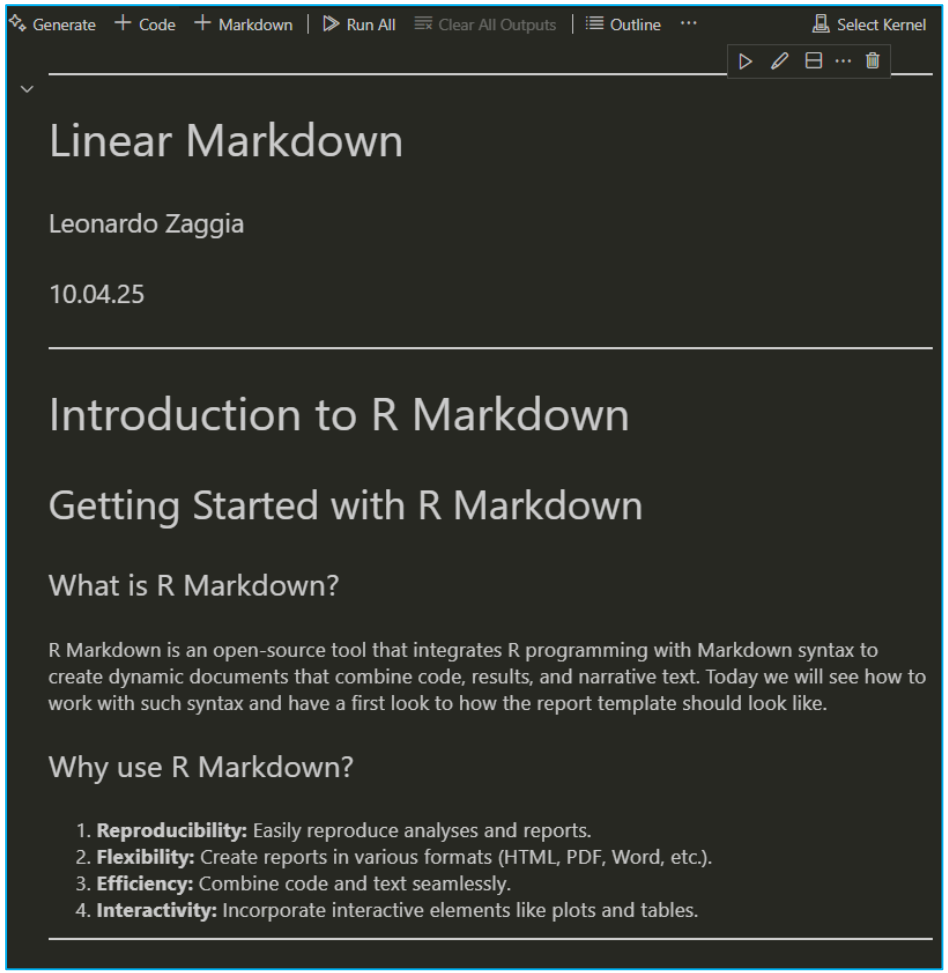
# An introduction to psy126 seminar

- Module structure
- Course info
- Semester schedule
- The Portfolio – exam dates and protocol
- Setting up
- Markdown syntax

# Overview – Create a .IPYNB file and leveraging its markdown features



# psy126 module structure

## Lecture

Test Theory and Test Construction
with Andrea Hildebrandt, Tuesdays 8-10 am

## Seminar

Test Analysis Applied
with Leonardo Zaggia, Group 1 Thursdays 2-4 pm and Group 2 Fridays 8-10 am

+

Sophia Haake

# Leonardo Zaggia

- Bachelor studies: University of Padua, Italy

Psychological science

**Class:** L-24 - Psychology

# Leonardo Zaggia

- Bachelor studies: University of Padua, Italy
- Erasmus+: University of Pécs, Hungary

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UNIVERSITY OF PÉCS

# Leonardo Zaggia

- Bachelor studies: University of Padua, Italy
- Erasmus+: University of Pécs, Hungary
- Master studies: University of Oldenburg, Germany

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# Leonardo Zaggia

- Bachelor studies: University of Padua, Italy
- Erasmus+: University of Pécs, Hungary
- Master studies: University of Oldenburg, Germany
- PhD research interest: Premature birth and its effect on cognition and brain development


DEPARTMENT OF PSYCHOLOGY
CARL VON OSSIETZKY UNIVERSITY OLDENBURG

Psychological Methods and Statistics lab

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# What about you?

# What about you?


*Statistical*

# Introduction – Test analysis applied

- Work opportunities
- Foundational to the most remarkable achievement in psychology
- Acquire critical thinking on controversial and crucial topics
  - Validity and fairness
  - Standardized testing bias
  - Impact on educational policy

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- Work opportunities
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(You want to get a good grade on the Report)

# Course info – How to get a good grade

- Attend at least 70% of the Seminar – but do not forget the Lectures!

## A Correlation Between Attendance and Grades in a First-Year Psychology Class

KENNETH P. GUNN
Laurentian University

**Abstract**

A correlational analysis of attendance records and grades in a first-year psychology class was performed. Subjects were informed that the attendance records would not affect their grades in the course. A correlation between attendance and final grades in the course yielded $r = .66$, $p < .01$.

sett, 1976; Jones, 1984; Street, 1975; Vidler, 1980). Buckalew, Daly and Coffield (1986) correlated initial class attendance of undergraduates to final grades and found a significant correlation of $r = .31$. They concluded that initial attendance is a fair predictor of future academic performance.

The present paper offers a correlational analysis of the relationship between attendance during the second semester of a two-semester first-year psychology course and final grades in the course.

The implications of this study were obvi-

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# Course info – portfolio evaluation criteria

- Attend at least 70% of the Seminar – but do not forget the Lectures!
- Follow the structure of the template
- Code along the classes
- Ask many questions – use the forum section of the course!
- Use the material that will be provided in the Lecture

# Course info – Administrative


- We will check the attendance at the beginning of the lecture
- Strict 70% attendance -> do not strategically skip classes
- Registration for exam: 10th April – 30th June
- Deadline for submission is the 30th of September
- You will not be able to withdraw or register after 30th of June 2025
- Submit only one .ipynb project -> more on submission in later sections

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# Content of the lecture

08.04. - Introduction to Psychometrics
15.04. - Recap: Classical test theory
22.04. - Generalizability theory
29.04. - Latent state and trait theory
06.05. - Measurement models for dichotomous scores
13.05. - Measurement models for polytomous scores
20.05. - Measurement models for quantitative scores
27.05. - Measurement invariance / differential item functioning
03.06. - Measurement invariance across time
10.06. - Multidimensional models
17.06. - Preference modeling (forced choice items against faking)
24.06. - Network models for clinical symptom measurements
01.07. - Machine learning in Psychometrics
08.07. - Summary

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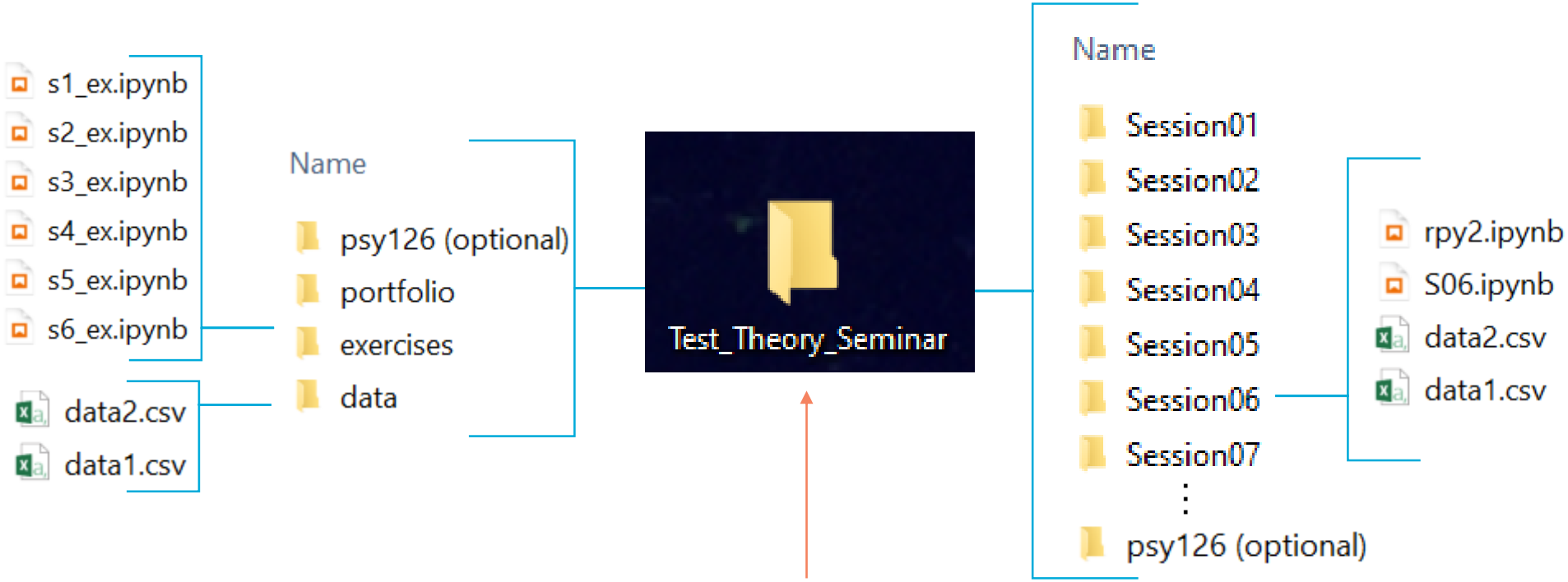
# Content of the seminar

10.04. - Introduction to creating your own Jupiter Notebook Portfolio
17.04. - Public holiday
24.04. - Recap psy111 + import/export data in Python
01.05. - Public holiday
08.05. - Distribution of the individualised tasks and datasets for the examination
15.05. - Import SIMULATED data and apply descriptive statistics + reliability analysis
23.05. - Apply measurement models for dichotomous scores
29.05. - Public holiday
05.06. - Apply measurement models for polytomous scores
12.06. - Apply measurement models for quantitative scores
19.06. - Apply measurement invariance analysis (groups, time)
26.06. - Apply multidimensional models for quantitative data
03.07. - Own data analysis
04.07. - Q&A + feedbacks on individual portfolios

# First steps – Folder structure




Be sure this folder is stored locally and not on cloud based partitionings such as OneDrive or iCloud

you ready for..