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Machine Learning and Data Mining
WISE 2024-25
Course Logistics

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Universität Koblenz

WeST
Web Science and Technologies

General Organisational Information

- **Course ID:** 0432028.
- **Aim:** Understanding the fundamentals and basics of machine learning and data mining.
- **For whom it is intended:**
  - Master students in Web and Data Science
  - Computer Science
  - Computer Visualistics
  - Mathematical Modelling, etc.

Coordination

- **Lecture and Tutorial coordinator:**
  - Dr. Ing. Stefania Zourlidou
- **Course Assistant:**
  - Renesa Ray

Lectures

- **Where:** In room D 028.
- **When:** On Mondays from 14:00-16:00.
- A couple of lectures will also be given on Thursdays in room F314, from 14:00 to 16:00. You will be informed about it in advance through the Forum (OLAT) and Lecture.

Tutorials

- **In Tutorials:** We explain the solutions of the last given assignment.
- **Where and When?** On Thursdays in room F314 from 14:00-16:00.

Communication

- **Use the Forum in OLAT, for questions regarding the course.**
- Check regularly the Forum for announcements.
- Join the tutorial session on Thursdays.
- Email: **strictly** for urgent situations.

Material and Further Information

- OLAT: `https://olat.vcrp.de/url/RepositoryEntry/4653613056`
- Slides, Further Readings and Assignments.

Assignments

- You can find the assignments in OLAT under the **Assignments** menu.
- An assignment typically comprises three sections:
  - Knowledge Questions
  - Practical Problems
  - Programming Problems
- Assignments are optional and will not be submitted for corrections or grading.
- It is highly recommended that students solve the assignments to enhance their understanding of the lecture material.
- Solutions to the assignments will be explained during Thursday's tutorial.

Exam

- **How:** Written
  - Remember to register for the exam!
- **Where:** Check on Klips website a few weeks before the exam
- **When:**
  - 1st exam: 05.03.2025 (verify on Klips)
  - 2nd exam: 25.03.2025 (verify on Klips)

Exam Eligibility

- In Week 51, an assignment will be released on OLAT. This assignment will cover various machine learning topics discussed since the beginning of the course.
- You need to submit it within the given period.
- A passing grade is 50%, which grants you eligibility to sit for the exams.

Prerequisites

- The fundamental concepts of Algebra
- The fundamental concepts of Calculus
- The fundamental concepts of Probability Theory
- The fundamental concepts of Statistics
- Programming skills (i.e., Python)

Course Success Checklist

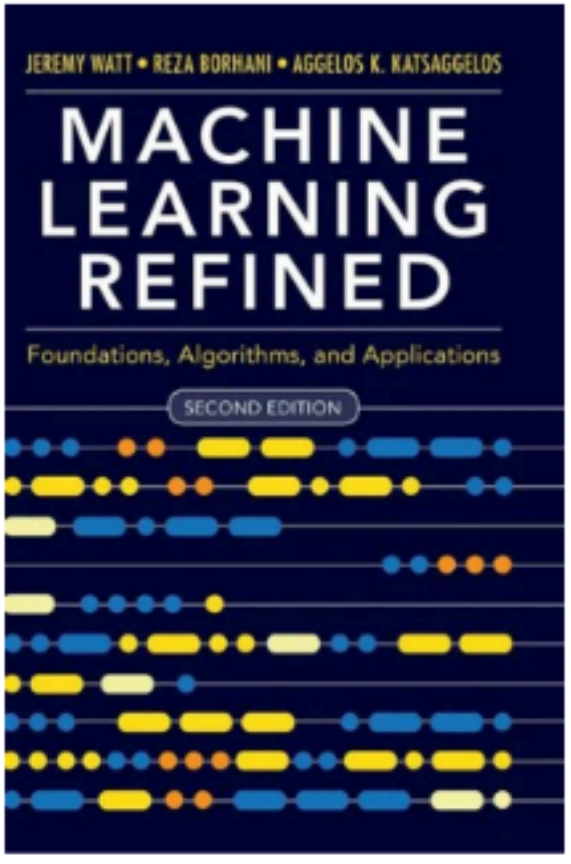
Maximize your course success by:

- Attending lectures and tutorials regularly.
- Actively using the provided learning materials.
- Completing and thoroughly understanding each assignment.
- Starting exam preparation early for the best results.
- Ensuring you register for exams on time.

Keep in mind: **Success comes from effort, and preparation is key!**

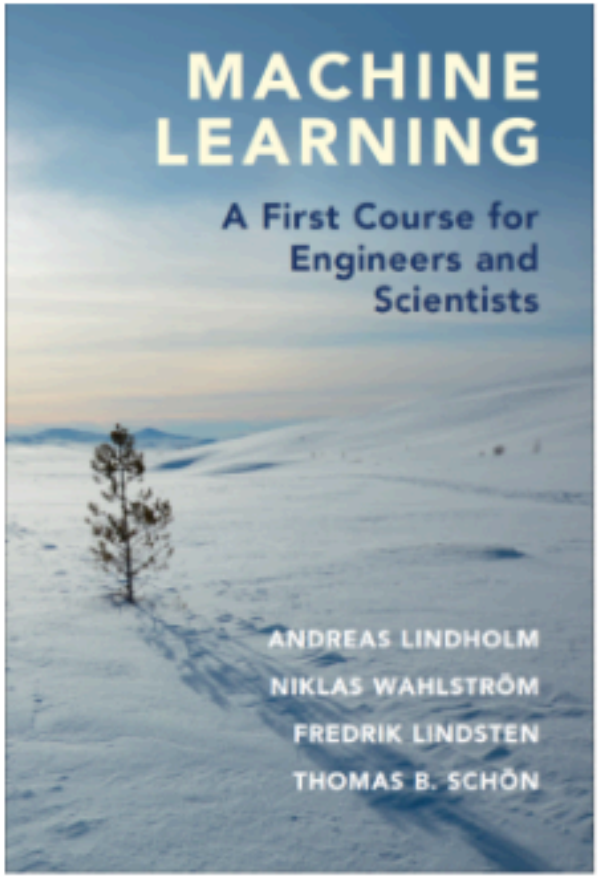
Textbooks

- The book *"Machine Learning Refined"* (2nd Edition).
- Available in OLAT.
- The author of the book has all the resources of the book (notebooks, figures, presentations, errata) available here: `https://github.com/jermwatt/machine_learning_refined/tree/gh-pages`

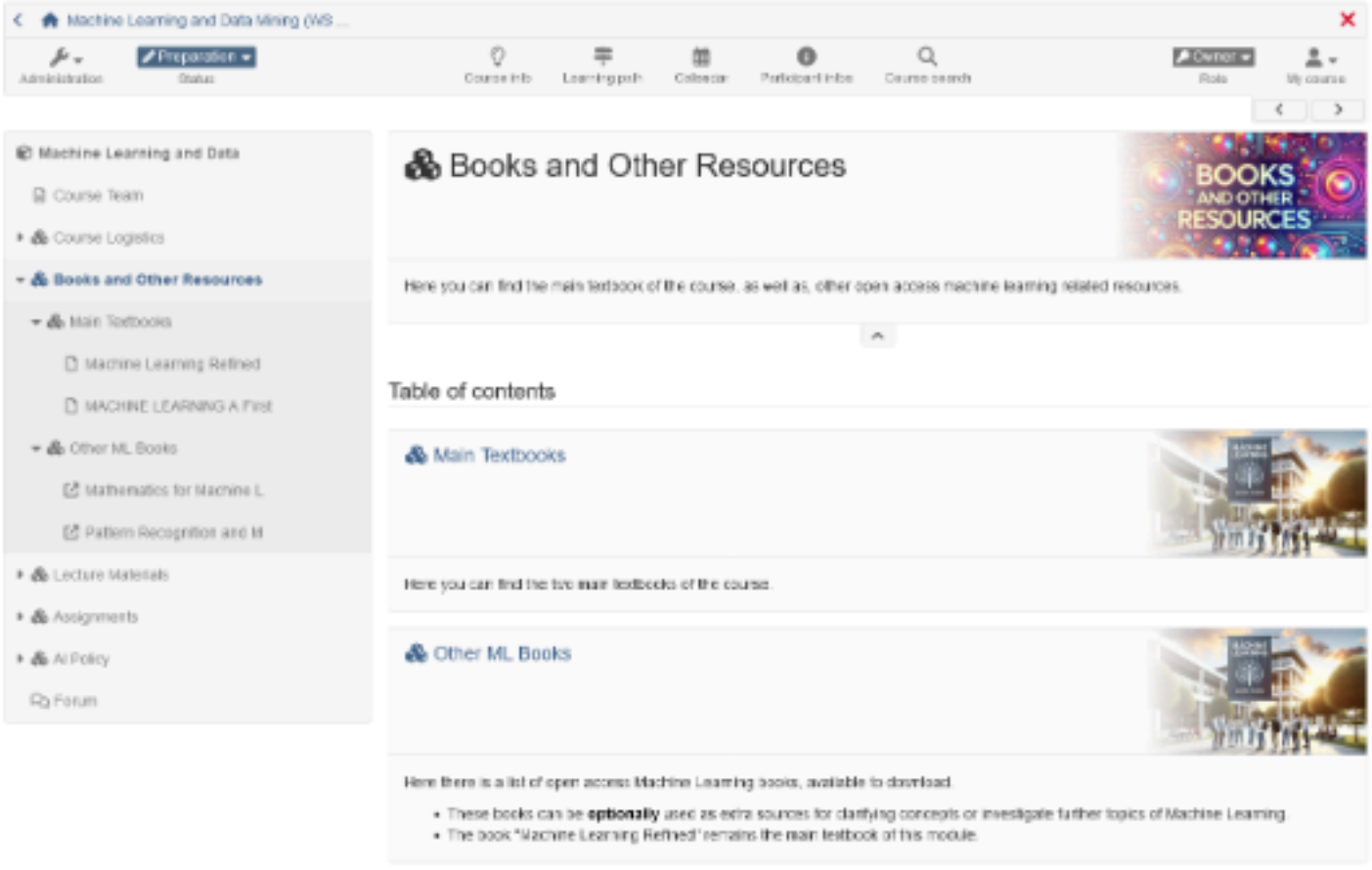


Textbooks

- The book *"Machine Learning - A First Course for Engineers and Scientists"*.
- Available in OLAT.
- Resources available here: `http://smlbook.org/`



Other Resources



- Additional resources are availble in OLAT course page.

Q&A

Any Questions?

Have a great beginning to the Machine Learning course!