



INFORMATION MANAGEMENT

COURSE LOGISTICS

Tools

- **Databases** and **SQL** for information management tasks
- **Python** for programming and automating IM related tasks
- Using public/commercial **APIs** to enhance your solution

Concepts

- What is information? Why does it need to be managed?
- What is an information system? What are the typical components?
- Why should we, and how can we model information?
- What is a database? What types exist, and for what?
- What is an API, and how can use it to automate information related tasks?

Analytical thinking and problem-solving

- How to abstract away complexity:
 - Data modeling
 - Process modeling
- How to divide a large problem into many smaller ones?
 - Planning and building information systems
 - Writing programs
 - Building SQL queries
- Learn how to solve problems with computers!
 - Design algorithms to solve problems

ORGANIZATIONAL TOOLS

Zoom

- For hybrid participation and our sessions on Friday ([Zoom room for this module](#))

ILIAS

- Central place for all material in a structured manner ([goto ILIAS](#))

Microsoft Teams

- Chat group for quick communication

Sessions

- Monday: 15:00 - 16:30 in HR 0004 (hybrid)
- Friday: 11:30 - 13:00 online ([Zoom](#))

Examination

- Oral examination after the end of lectures (if we are a few students only)
- 1 h written examination (if we are a larger group)