

Discrete Structures

A1. Organizational Matters

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University of Basel

September 16, 2026

Organizational Matters

People

Lecturers



Malte Helmert

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Gabi Röger

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Assistant



Tanja Schindler

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- office: room 04.005, Spiegelgasse 1

People



Tutors

- Maria Desteffani (maria.desteffani@unibas.ch)
- Pascal von Fellenberg (pascal.vonfellenberg@unibas.ch)
- Shashwat Kumar (kumar.shashwat@unibas.ch)
- Tobias Aschwanden (tobias.aschwanden@unibas.ch)

Target Audience

target audience:

- this is an introductory course on the Bachelor's level
- we cover mathematical foundations that are particularly useful for the computer science curriculum
- main target audience: B.Sc. Computer Science, 1st semester
- all other students welcome

Content: Discrete Structures

- mathematical thinking and proof techniques
- sets and relations
- group theory and permutations
- modular arithmetic
- graphs and trees
- recurrence relations
- formal logic

Learning Goals

- proficiency in abstract thinking
- ability to formalize mathematical ideas and arguments
- knowledge of common mathematical tools in computer science

Relationship to Previous Course

- original course [Discrete Mathematics in Computer Science](#)
- with 6 CP, 3h lecture & 1h exercise per week
- originally taught in 3rd semester
- had to remove material when it was moved to the 1st semester in 2023
- this year: reintroducing the material

If you already got credit for Discrete Mathematics in CS, you cannot again get credit for Discrete Structures.

Enrolment

- `https://services.unibas.ch/`
- **official deadline:** October 12
- actually today, so that you get all relevant emails and access to the ADAM workspace

Discrete Structures Course on ADAM

ADAM

<https://adam.unibas.ch/>

- link to website with slides
- submission of exercise sheets
- model solutions for exercise sheets
- link to Discord server (for interaction among participants, but you also get answers from lecturers, assistant and tutors)
- additional material

Language

- The course is taught in English.
- All lecture material is in English.
- We (lecturers, assistant) speak German and English.
- You are also welcome to ask questions in German.
- Exercise submissions are usually in English but can be in German depending on the exercise session.

Lectures

- Monday and Wednesday 16:15–18:00,
Hörsaal U1.131, Biozentrum
- first half of the course taught by Gabi Röger,
second half by Malte Helmert
- on December 16: Q&A session for exam preparation

Exercises

Exercise sheets (homework assignments):

- must be solved in **groups of two or three**
(not alone or in larger groups)
- mostly theoretical exercises
- exercise sheets on ADAM every Monday after the lecture
- have questions or need help?
 $\rightsquigarrow$ assistance provided in Thursday/Friday exercises
- due on the following Sunday (23:59)
(upload to ADAM at <https://adam.unibas.ch/>)
- we only accept readable PDFs
 $\rightarrow$ ideally prepared with $\text{\LaTeX}$
 (template, cheat sheet and intro on ADAM)

Question: Who has experience with $\text{\LaTeX}$?

Exercise Sessions With Tutors

Exercise Sessions (starting September 24/25)

Thu 16:15–18:00	Spiegelgasse 1, room 00.003 with Shashwat
Thu 16:15–18:00	Spiegelgasse 5, room 05.001 with Maria
Fri 10:15–12:00	Kollegienhaus, room 107 with Tobias
Fri 10:15–12:00	Spiegelgasse 1, room U1.001 with Pascal

- common mistakes/misconceptions
(full model solutions on ADAM)
- questions about exercise sheets and the course
- support while you solve the exercises
- oral feedback on your past homework (on request)

important: please fill in the survey on ADAM for the group allocation until **Friday 12:00** (September 18).

Exam

- Written exam
- January 18, 2027, 16:00-18:00
- Maurice E. Müller Saal, Biozentrum
- 8 ECTS credits
- admission to exam: 50% of the exercise marks
- grade for course determined exclusively by the exam
- no repeat exam (except in case of illness)

Plagiarism

Plagiarism is presenting someone else's work, ideas, or words as your own, without proper attribution.

For example:

- Using someone's text without citation
- Paraphrasing too closely
- Using information from a source without attribution
- Passing off AI-generated content as your own original work

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Long-term impact:

- You undermine your own learning.
- You start to lose confidence in your ability to think, write, and solve problems independently.
- Damage to academic reputation and professional consequences in future careers

Plagiarism in Exercises

- You may discuss material from the course, including the exercise assignments, with your peers.
- **But:** You have to independently write down your exercise solutions (in your team).
- AI support is acceptable to the same extent as it is acceptable from someone who is not a member of your team.

Consequences of clear plagiarism:

- 0 marks for the exercise sheet (first time)
- exclusion from exam (second time)

You are jointly responsible for your submission as a team.

Inconclusive Cases

If a tutor has serious doubts

- 1 The solution receives **0 marks initially**.
- 2 This is a **temporary assessment**, not a final accusation of plagiarism.
- 3 If you did not plagiarise, take it as a compliment.
Your solution was probably exceptionally good.

How to get the marks

- 1 Come to your next exercise session.
- 2 Explain your solution and reasoning to your tutor.
- 3 If you can demonstrate that you understand the solution,
the marks are awarded.

Exercises too difficult? We are happy to help!

Special Needs?

- We (and the university) strive for equality of students with disabilities or chronic illnesses.
- Contact the lecturers for small adaptations.
- Contact the Students Without Barriers (StoB) service point for general adaptations and disadvantage compensation.

Questions



Questions?