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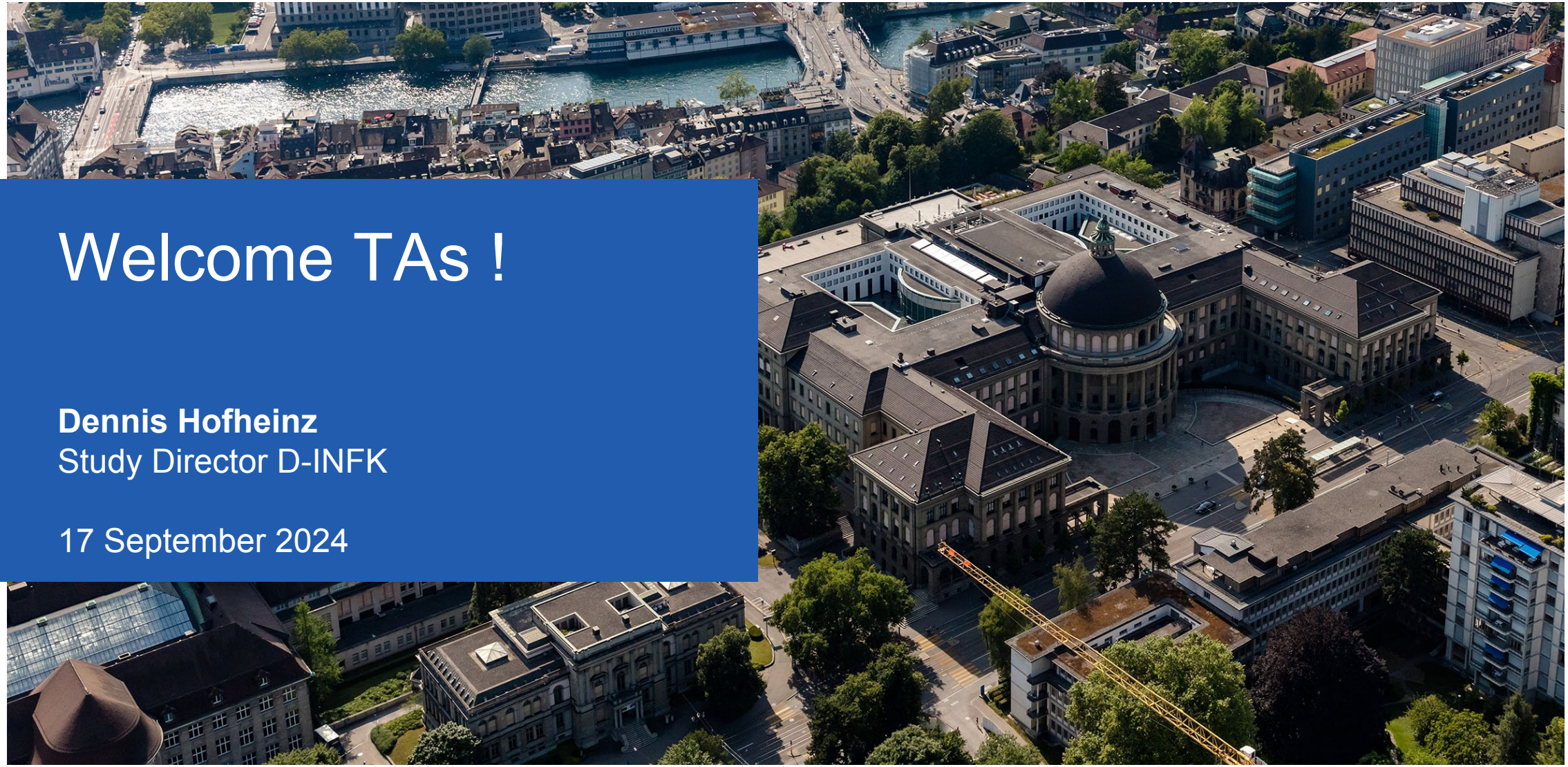

Welcome TAs !

Dennis Hofheinz
Study Director D-INFK

17 September 2024

Your Importance

- We have about 3000 bachelor and master students at D-INFK, plus students in service courses and teach about 65 courses with exercise classes per semester

- Learning does not (only) work like this:

- The assistants‘ (your) contribution to learning is highly relevant for the success of teaching.

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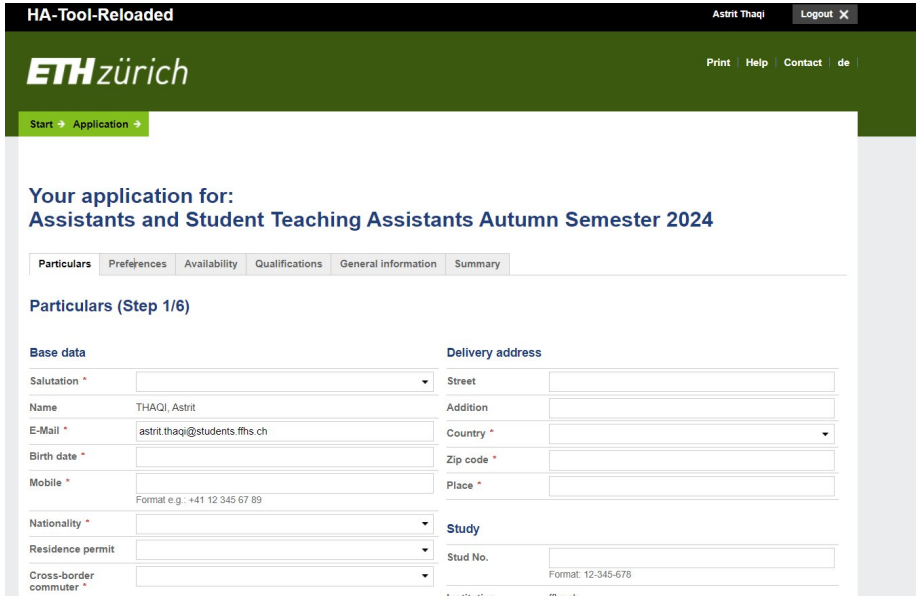
Technical / Administrative Processes

Astrit Thaqi
Employments Teaching Assistants

Registration Process from HAT to HR



1) Initially, you had applied through the HAT tool, after which the Head TA or Lecturer made an offer that you accepted.

2) Afterwards, you received a link to upload your documents (residence permit, CV, diplomas, etc.), which I then received and reviewed.

Make sure that your residence permit is valid at all times!

Registration Process from HAT to HR

3) HR reviews your documents.

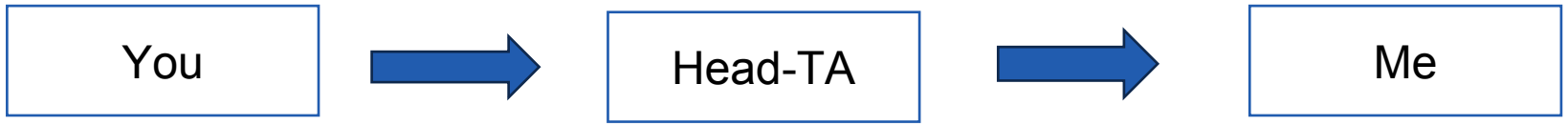
The process takes longer for non-EU countries as additional approvals are required, resulting in 2-4 weeks delays.

4) HR then issues the contracts and sends them to your address.

Important: If you move to a new apartment, please update your address here: www.adressen.ethz.ch

Timesheet Reporting

- To find out who the Head TA is, please ask the person who made you the offer, as this is often the same person.
- Please send your timesheets to your Head TA or Lecturer.



- Hours must be reported to your Head TA by the 10th of the following month.
  Some courses use a tool for this (https://timetracker.inf.ethz.ch)
- Your salary is paid on the 25th of the month.
- During the semester, you can work a maximum of 15 hours per week, typically around 10 hours per week.
- During semester breaks, it is allowed to work up to 41 hours per week.
- If you have forwarded your hours, but haven't received your salary, you should contact me.
- If hours are reported late, they will be paid out in the next month.

Multiple Employments / Duration

- The duration of your contract is from **September to January 31st, 2025.**
- You are allowed to work for multiple courses, but **note that you must not exceed** 15 hours per week during the semester and 41 hours per week during semester breaks.
- If contract extensions are needed, the Head-TA will contact you.
- Only start working after you have received the contract, as you are not insured otherwise.
- For questions regarding health insurance: internationalstudents@ethz.ch

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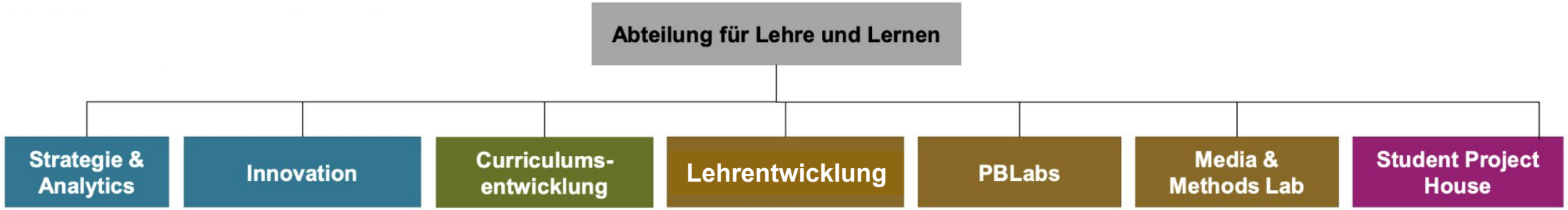
Didactics Course Offerings by ETH

Karin Brown
Unit for Teaching and Learning (UTL)

Unit for Teaching and Learning (UTL)



HS24 Angebote für studentisch Hilfsassistierende

Die wichtigsten didaktische Kompetenzen
6 Stunden
100% Eigenständig und online
0 KP
Keine Vorkenntnisse nötig

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Being a TA at D-INFK

Felix Friedrich
Study Coordinator D-INFK

A few numbers

- Autumn Semester 2024
  - +3k Bachelor Students at ETH (32k total)
  - +400 Bachelor Students at D-INFK (1700 total)
  - +400 Master Students at D-INFK (1550 total)
  - 65 Courses with Exercises offered by D-INFK
- Courses
  - Computer Science Bachelor
  - Computer Science Master

  } Computer Science for Computer Science Students
  - Service Courses

  } Computer Science for Non-CS Students

TA profiles

- Tutor
  - typically holds weekly exercise sessions with 20-30 students
  - typically grades homework exercises
- Study-center TA
  - answers students' questions at a fixed (typically weekly) time and place
- Back-office TA
  - helps with creating exercise / course material
- Head TA (typically PhD level)
  - manages exercise sessions, schedules TAs, TA meetings, keeps an overview of the exercise material
- Project interview
  - makes 1:1 interviews with students, assessing and grading project work
- Exam Supervision or -Grading
  - helps with proctoring or grading exams

Your new role

As a TA

- You take on a new role at the D-INFK department
- You make important contributions to computer science education and have a share in the success of teaching at our department
- You have new responsibilities

Rules

- Take your new role seriously and behave professionally, be loyal
- Do not misuse your power
  - In your new role you are not the best friend to be asked for favours
  - Do not confuse interest in content with personal affection
  - Be respectful
- Protect yourself
  - You are there to help, but you are not responsible for solving other people's problems.

Traditional Courses

Most (traditionally taught) courses at ETH are organized on a dual basis

- Lectures
  - Convey material in a systematic way
    - students see an algorithm
- Exercises enable
  - to secure the newly learned knowledge
    - know an algorithm → understand an algorithm
  - to bridge the gap between passive, systematic knowledge and active knowledge for applications
    - know an algorithm → implement an algorithm
  - to use new tools
    - know an algorithm → apply an algorithm

"Systematically acquired knowledge is structured, organized and retrievable differently than most practical application situations require. Knowledge that is principally available remains dead, lazy and unused, although it is actually needed to solve certain problems. The discrepancy between learning and application conditions is usually very large. By now, the scientifically founded conclusion can be drawn that learning must be both systematic and situated." [Weinert (1998)] *

from Norbert Hungerbühler's Training of teaching assistants, D-MATH

Misconception

- Knowledge and understanding of a teacher can be transferred error-free to the learners
- Exact definitions cannot be misunderstood
- What is logically correct is also understandable

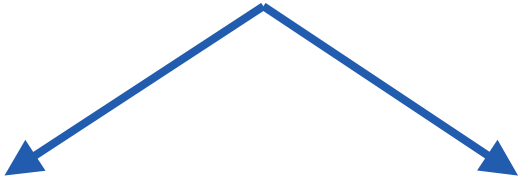
from Norbert Hungerbühler's Training of teaching assistants, D-MATH

Challenges

Heterogeneous pre-knowledge, particularly in the first year

> “The key factor influencing learning is what the learner already knows. You have to determine this prior knowledge and then you teach your students accordingly.” [D.P. Ausubel et al (1980/81)]

from Norbert Hungerbühler's Training of teaching assistants, D-MATH



Find out:

- Interactive lessons
- Quizzes
- Grading Homework
- Informal queries

Know what has been covered in class !

- Consult lecture slides, lecture notes and / or video recordings, if necessary

Official Expectations

(From "Qualität der Lehre an der ETH Zürich", Qualitätskriterien für Studiengänge und Lehrveranstaltungen sowie Erwartungen an Personen, basierend auf der Lehrpolicy der ETH.)

Commitment

- The assistants are **competent** in terms of course content and methodology. They clarify their role and contribution as assistants in the respective courses with the lecturers. They recognise opportunities for **optimising the teaching process**, are committed to teaching innovations and take advantage of opportunities to get involved. Assistants are familiar with the rules of the study process that are relevant to them.

Support for learning

- Assistants support students in acquiring subject-related competencies and transferable skills as described in the qualification profile. They act as a **link between students and lecturers**. **They pass on their own observations and insights to the lecturers. Assistants promote an optimal learning atmosphere and team spirit among students.**

Communication

- Assistants **communicate learning objectives and study requirements to the students**. They give constructive **feedback to lecturers and students** and deal with criticism of their own behaviour.

Further development

- Teaching assistants continuously **develop their own teaching skills** through personal further education in the pedagogical-didactic area and an open exchange of experiences.

Our Expectations

- Be informed
  - Know the course you teach
  - Know what has been taught in the lecture
  - Go to assistant meetings and be prepared
- Be prepared
  - Make a plan (what, when / how long, how)
  - Have a plan B (for technical problems)
  - Be on time
- Communicate
  - Ask, when you don't know what is expected from you
  - Ask, when you don't understand the material
  - Proactively inform, when you see any issues
  - Give constructive feedback!

Exercise sessions are not a second lecture.

Prepare your sessions sufficiently ahead of time. Doing things in the last minute might sometimes be necessary but it is **not cool**.

Solve tasks for yourself and help improving them

Preparation of your lessons

- **Reflect** tasks in terms of their **content**
  - what are students supposed to learn
- **Reflect** tasks in terms of **didactis**
  - expected prior knowledge
  - existing knowledge
  - difficulties to expect
- Think about **required introductions** and hints

gap!

Short (!) summary of the theory
Offer a repetition where necessary

Prepare hints and repetitions in written form
- do not improvise (quality)

Lessons

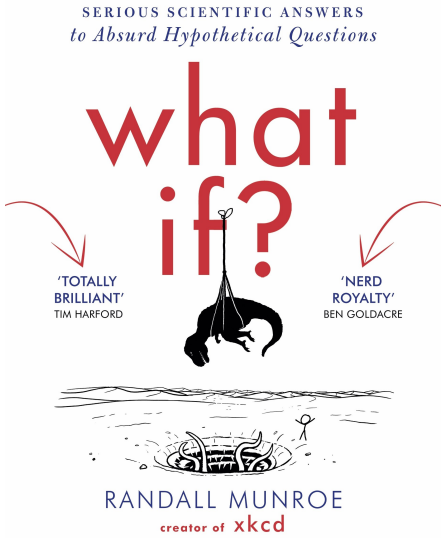
- Follow a **plan**, improvise only where necessary
- Be a **coach rather than a teacher**
  - Never solve a task (alone) by yourself in front of the class
  - No second lecture!
  - Interactive problem solving!
  - Pose questions, as many as possible
- Create a **climate of trust**.
  - Competence without Arrogance -- condescending or even contemptuous remarks have no place in the classroom.
  - Admit mistakes or ignorance. Ask for time to think about questions you cannot answer.
- Provide ample **opportunities for success**
- Do not expect everyone to love you.
  - Try to distinguish between individual opinions and issues that are relevant to many.

Feedback and Debriefing

- Collect commonly made mistakes and bring them to the classroom
  - what were the perceived difficulties?
  - strategy to overcome?
  - takeaways for the future?
- Provide individual feedback, as much as possible
  - Prepare statements for frequently made mistakes (efficiency)
  - Ideally: monitor submissions and ask
- Quality and Quantity
  - Be reasonable with help and feedback:
    Give good quality, personal feedback. Try to involve all individuals but don't overdo it.
    You are neither a human debugger nor should you invest time in "hopeless" cases.
    Obey the 20/80 rule: do 80% of the work in 20% of the time (or so).
  - (only) invest time where your support is accepted. If in doubt: ask!

Communicate your findings to the lecturers!
- Do tasks need adaptation?
- Observed misconceptions?

What if



- I don't understand the material
  - Ask, difficulties are normal, human and expected
- I don't feel well
  - Inform the head TA or lecturers as early as possible
  - If possible, inform your students about unexpected changes
- My room is locked, or I have technical problems
  - Stay calm, call the building services, write a mail to the head TA, lecturers or mailing list
  - Improvise, use a different room, have a coffee with the students (etc.)
- I am having too much work to do, I'm afraid that my academic performance will suffer as a result.
  - Speak with the Head TA and / or the lecturers. This must not happen.
  - Do not work unpaid.

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Tipps and Tricks

Teaching experiences shared by
Adel Gavranovic and Filip Cvijanovic