


Troubleshooting labs and tutorials

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Schedule

- Why is preparing for potential problems in labs/tutorials important?
- How can we identify solutions to our problems?
- Tackling frequent problems in labs
- Tackling frequent problems in tutorials
- Presentation by Dr. Aurora Constantin: Dealing with challenging students
- Your own problems, through self-evaluation

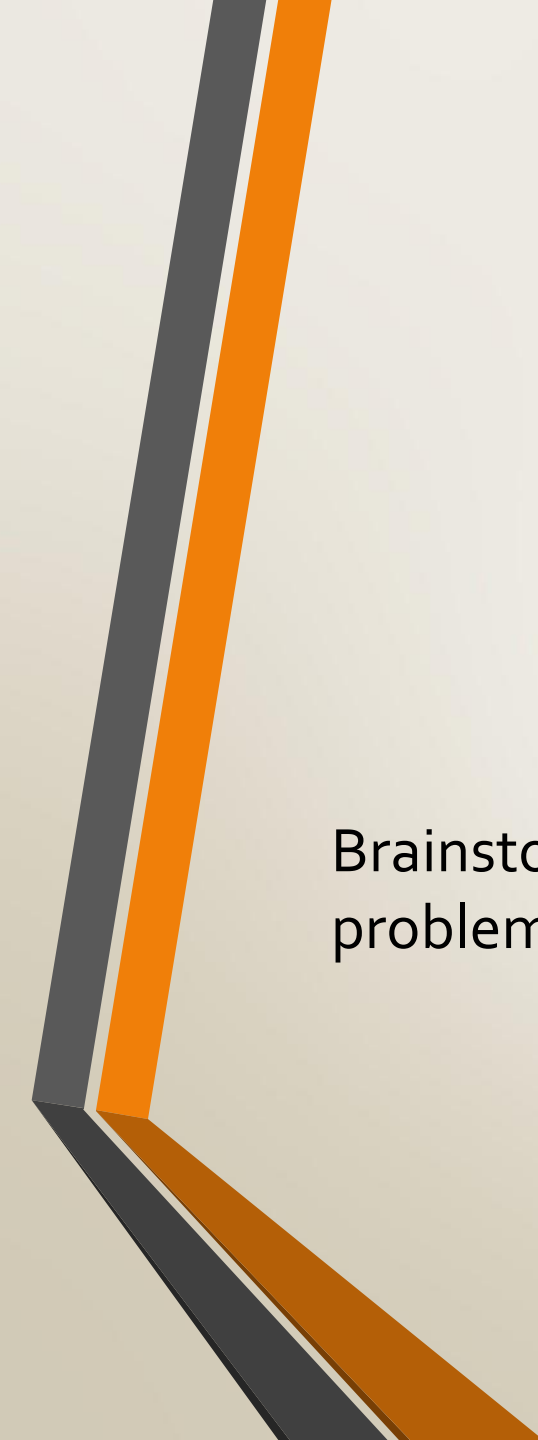


Why is preparing for potential problems in labs/tutorials important?

Brainstorm the motivation for troubleshooting when preparing for labs/tutorials

Why is preparing for potential problems in labs/tutorials important?

- Things sometimes don't go according to plan:
 - Students can be unpredictable (consider level of understanding, level of preparation, motivation, interest, time management together with other courses, etc.)
 - Computers, software, projectors etc. can break
- It's best to have some strategies at hand to avoid unpleasant situations (e.g. getting stuck, reacting unprofessionally or in an unpleasant way)



How can we identify solutions to our problems?

Brainstorm the different sources of support for finding solutions to our problems

How can we identify solutions to our problems

- **Through self reflection, trial and error**
- Through discussion with colleagues from the course team
- Through discussion with other tutors and demonstrators
- By participating to training (Informatics, IAD)
- By looking them up in educational literature

Frequent problems in labs

In groups, propose solutions to the following challenges:

- *A needy/demanding student taking up a lot of your time with questions/asking for help and hindering you from working with other students*
- *A student working on something else during his/her scheduled lab*
- *You not knowing how to answer a question*
- *Something going wrong with computers/software*

Dealing with a particularly demanding student

- Investigate **possible reasons**:
 - **Disability/particular needs**: consult CO, discuss with student about what helps them
 - **Language problems**: speak clearly, slower, rephrase, use visual aids, if necessary refer to CO or advise on English training courses.
 - **Not enough preparation**: stress its importance, help to get started, point to material.
 - **Attention-seeking behaviour**: may need encouragement, making it interesting or more challenging.
- Make it clear that he/she needs to take over the work once he/she is back on track, and that you need to attend to other students too

Dealing with student working on something else

- Investigate **possible reasons**:
 - If coursework deadline, be understanding as long as there is space for him/her in the room (attendance is not mandatory)
 - Lab is too easy and finished: ask him to explain why; give additional tasks
 - Lab is too difficult and he/she has given up: offer advice, explain relevance
 - Lack of interest: check why (relation to other courses, covered in the past?), explain relevance, make it interesting by giving practical real-life examples and relating to your commercial work/research, be enthusiastic

You not knowing how to answer a question

- Fight temptation to give answer which is just your opinion, which may be wrong!
- Ask student to reformulate question to have some time to think
- Re-direct question to other students, if student working in group
- If the question is not about your labs, re-direct student to colleague who can help
- Be honest about not knowing answer
- Promise to look it up/ask about it and inform student, and do this

Dealing with a technical problem in the lab

- Do not panic!
- If well-known (with experience) issue (e.g. network cable unplugged), address it
- If it only happened to one student and other computers are available, ask him/her to move to another computer
- If need be, ask students who are not there for the lab to switch to a different lab
- Otherwise, announce student(s) about your need to seek help, and go see the computing support team in room 4.11

Frequent problems in tutorials

In groups, propose solutions to the following challenges:

- *Students not preparing ahead of time*
- *Some students not seeming to keep up*
- *Some students being hesitant to participating*
- *Some students dominating the discussion*

Dealing with students who don't prepare

- Find out reason
- If real reason (e.g. coursework deadline), be understanding
- Explain the importance of preparation: for assessment, passing the course, pre-requisite to other courses, relevance for specialism
- Do not encourage non-preparation by providing summaries or solutions yourself
- Raise interest in the material by explaining its relevance

Dealing with students who do not seem to keep up


- Pay attention to body language and facial expression indicating this!
- Encourage students to interrupt you
- Stop frequently to ask for understanding, or to ask questions about what was just discussed
- Be prepared to stop and repeat
- Try to repeat from a different angle
- Ask students who have understood to explain
- Summarise main points after each task
- Leave room for questions in your schedule

Dealing with hesitant students

- Encourage discussion and interaction by grouping students to work on a question
- Pass by groups to check work and provide feedback
- Round robin to explain their group's solution, with a different speaker each time
- Be friendly, approach shy students individually with encouraging comments
- Encourage interaction right from the start

Dealing with dominating students

- They are important assets, important not to alienate them
- Put them in common group
- Round robin to also give others opportunities to contribute
- Sit near them, reduce non-verbal encouragement
- If too insistent and raising less relevant points, explain importance to pass to next point to keep to schedule, and discuss remaining comments after session.



Talk by Aurora Constantin:
Dealing with challenging students



Your problems

Fill in the provided pro-forma with information about a recent tricky situation that you encountered/are afraid of encountering and how you have planned/plan to address it. Discuss your problems in small groups. You can re-use the proforma to later decide how effective your solution was and/or how it would need to be improved.

Resources

- [Informatics Teaching Support training webpage](#); especially [slides on "What makes a Good Tutor and Demonstrator in Informatics?" training session](#)
- **"Tutoring and Demonstrating: a Handbook"** [chapter 5](#) ("Demonstrating") p. 46, [chapter 4](#) ("Problem solving classes") p. 37, and [chapter 3](#) ("Tutoring in the Arts and Social Sciences") p. 19
- **"Laboratory demonstrating", "Tutorial teaching- Problem solving classes" and "Open discussion classes" material on the ["IAD Resources on Tutoring and Demonstrating" channel in Learn](#)**
- **Future IAD courses on tutoring:**
 - "Enhancing Tutorials"- Wed 20 Feb