How To Be My Student

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Abstract

This document contains some general guidelines for the academic interaction between the author and his students. It covers organizational aspects of lectures, theses and general academic interaction between students and the author.

Contents

1 General Remarks

This document is intended mainly for students of Computer Science at the West University of Timişoara. It may, however, cover other students (provided certain conditions hold, e.g. working on a thesis under the author's supervision, other collaborations).

I start with some general remarks for the reader in the above mentioned rôle:

- As a student, your purpose should be to get an education in **computer science**. This education is not going to just happen to you, rather you should actively pursue it.
- My rôle is to contribute to this education and help you in achieving your goals.
- The subject of your study is **computer science**:

  science: "The investigation of natural phenomena through observation, theoretical explanation, and experimentation, or the knowledge produced by such investigation. Science makes use of the **scientific method**, which includes the careful observation of natural phenomena, the formulation of a hypothesis, the conducting of one or more experiments to test the hypothesis, and the drawing of a conclusion that confirms or modifies the hypothesis [...]." – see [dic, 2005].

  scientific method: "The principles and empirical processes of discovery and demonstration considered characteristic of or necessary for scientific investigation, generally involving the observation of phenomena, the formulation of a hypothesis concerning the phenomena, experimentation to demonstrate the truth or falseness of the hypothesis, and a conclusion that validates or modifies the hypothesis." – see [dic, 2009].

  computer science: "... the body of knowledge and practices used by computing professionals in their work." [...] "The fundamental question underlying all of computing is, *What can be (efficiently) automated?*", see [Denning, 2000].

  My goal as an educator is to contribute your education as a future "computing professional". Our academic collaboration is likely to work better if all parties involved are considering the same assumptions.

The said academic collaboration includes my giving lectures, exercises and labs, supervising theses, as well as being available to answer questions, providing support and collaborating with students on research projects.

This document is organized as follows: Section 2 gives some guidelines with respect to lectures and associated activities, Section 3 covers theses under the author's supervision, Section 4 covers various other possible collaborations (research projects, other), while Section 5 covers the way to organize communication between the author and students.

2 Lectures, Exercises, Labs

2.1 Lectures

- What I do:
  - Give lectures (my goal act as a catalyst for the learning process, to make information available and accessible – therefore I do not recite or read aloud from books, rather I introduce and explain new concepts, how these can be applied, what is their relevance, etc.). A lecture is a learning process, i.e. that's where learning happens.
  - Provide lecture materials (in general in the form of lecture notes[1]), see Section 5 for details on how to get the materials.
  - Provide pointers to relevant literature (possibly indicating particular Chapters, Sections, pages relevant).
  - Even if not stated explicitly every time, at the beginning of each lecture I reserve a few minutes to answer questions related to the lectures (however, if the questions require more than a couple of minutes to answer, this will be done at other times, see Subsection 2.3 for details),
  - I appreciate feedback on the content of the lectures, and also information on any mistakes (typos, etc.) that may occur in the lecture materials.
- What the student should do:
  - Attend (and participate actively in) the lectures – although the University policy requires that students attend at least half of all lectures, I strongly suggest that students should attend and participate in all lectures, it will help with better understanding the subject[2]. There may be aspects discussed in the lectures that are not available in the distributed materials.
  - Study the materials provided **after each lecture**, identify and try to understand and apply the new concepts introduced. Make sure you ask questions to clarify any issue you may still have with the material.
  - Try to apply what you learned (homeworks will be proposed for each lecture, if you think you can use more work this will be provided).
  - Read the alternative material provided, apply the same process as above (anything you don't understand, prepare questions).
  - (Optional, but strongly encouraged:) work on the projects I (typically) propose for each lecture.
  - **Work together with your colleagues**, working in teams can be beneficial – however do not abuse this, if other people do your work you've learned nothing.

[1] It may be the case that lecture notes are still under development. In this case I will make sure alternative materials are available.

[2] Also, experience shows that students who attend lectures regularly have significantly better results in exams compared to those who do not.

- In particular, it would be useful to organize **discussion groups**[3] where students can ask questions, exchange ideas, materials relevant to the lectures (in particular, notes taken during the lectures until "official" materials become available).
- (In general) as much as possible, try to automate (i.e. implement in some programming language) solutions to problems.

2.2 Exercises and Labs

- What I do:
  - Work together with the students (typically) on problems that were part of the homework.
  - Make sure that everyone gets to work during the semester (e.g. presenting their solution to the rest of the class).
  - Try to help those who have problems understanding the subject.
  - Keep trace of the students' work (which will reflect in the final grade).
- What the student should do:
  - Be present (as opposed to the lectures, presence is compulsory) and take active part
  - Solve the homeworks before the exercise/lab session.
  - Have knowledge of the corresponding material presented in the lecture.
  - Indicate the problematic exercises that should be discussed during the session.
  - If the student failed to complete an assignment, they should be able to present their (failing) approach – often they will be invited to solve the failed exercise (together with the rest of the class).
  - If the student is not able to attend a session, and could not find an alternative time (i.e. go with another group) they should inform me beforehand and send the homework in electronic format, via email (see below, Section 5 on how to do that).

2.3 Questions and Additional Support

- What I do:
  - Every week I will be available (2 hrs) to answer any questions related to lectures, exercises, labs.
  - (Typically) a couple of days before any examination I offer to meet with all students to answer any last questions, clarify any issues remaining (if no such offer was made in an explicit way, students can ask for such a meeting).

[3]Discussion groups can be implemented in different ways: mailing lists, online forums, social networks, etc.

  - I can also offer additional support (books, other materials, computing support – subject to availability).

- What the student should do:
  - If there are questions, try to get an answer during our regular meetings (lecture, exercises, labs).
  - Else, try to use the mailing list to get your answer.
  - Else, if you need to meet me in person, send an email (see Section 5) to set up a meeting.
  - Before asking your questions, make sure you covered all the materials available to you (lecture notes, sources available).
  - Try to contribute to the mailing list, if you have answers to questions posted there.

2.4 Exams

- What I do:
  - Part of my job is to evaluate your knowledge of subjects covered in the lectures I give.
  - As a guideline, see below how I map the grades to your level of knowledge:

    10: excellent (outstanding performance with only minor errors),

    8-9: very good (above the average standard but with some errors),

    6-7: satisfactory (fair, but with significant shortcomings),

    5: sufficient (performance meets minimum criteria),

    0-4: fail (significant work has to be done).
  - When grading, I take into account all the work done (or lack of it) by the students during the course of the lecture (homeworks, projects, participation in the lectures).
  - Exact details of grading will be given before each exam.

- What the student should do:
  - Show up at the exam.
  - If the exam is written, then only bring blank paper and pen (unless otherwise specified).
  - No cheating.

- Successfully coping with (repeated) failed exams:
  - Following repeated failure at exams, in order to ensure success, some work can be assigned to students.
  - This work will be sufficient for the minimum passing grade and will be designed in a way that ensures the minimum required knowledge is obtained.
  - Information is available on request, following at least two attempts to pass the exam.

3 Theses

- What I do:
  - Propose topics for theses[4] (logic, computer algebra, program synthesis, computer supported theory exploration are some of the topics I am interested in).
  - Provide support and guidance throughout the time the thesis is elaborated.
  - Provide materials relevant to the topic.
  - Meet with the supervised student regularly.
- What the student should do:
  - When choosing me as a thesis supervisor, acknowledge all the conditions, listed in the following:
    * the student is supposed to work throughout the year,
    * in regular meetings the student should present the progress so far,
    * if no progress was made, this should be addressed as soon as possible (no missing meetings),
    * theses will be typeset in TEX/ LATEX, the standard for scientific publishing (exceptions possible in certain extraordinary circumstances, e.g. interactive mathematical texts in Mathematica/Maple),
    * the student will present their work in the frame of seminars (see Section 4), well before the defense of their work at the end of their study.

4 Other Work

It may be useful for your development as a computer scientist to take part in the other activities in the Department, such as seminars and research projects. By participating in such activities, you will go beyond the topics covered strictly by your lectures.

4.1 Seminars

A **seminar** consists of a (typically) small group of (advanced) students engaged in original research or intensive study under the guidance of a professor/instructor, meeting regularly to discuss their reports and findings.

The Computer Science Department has a regular seminar in which members of the department, guests and students (typically master, PhD students) present their work. This should give an overview of the various topics of interest in the Department. If you are interested in topics covered in this seminar, contact me or the organizers about attending.

[4] Diploma, master theses. I can also be involved in supporting PhD theses, but cannot yet be supervising such theses.

Some informal seminars on various aspects of computer science (logic, computability, complexity, functional programming, etc.) are also taking place in the frame of the Department or the E-Austria Research Institute, which is associated with the Department.

Ongoing research projects also have corresponding seminars.

If you are interested to participate in such seminars, contact me. If I am not involved in the ones you are interested, I will try to point you to the right people to talk to.

4.2 Research Projects

There are several possibilities to work in the frame of ongoing research projects at the Computer Science Department and E-Austria Research Institute:

- a thesis in the frame of a project,
- a summer practice stage in the frame of the project,
- a job in the project.

To find out about ongoing projects, look them up on the Department and E-Austria Research Institute web pages, attend the seminars, ask.

5 Communication

For communication use **email**[5], or meet me in class or in my office (048, but it is better to send an email beforehand). In the case the subject is relevant to other people (e.g. I give the lecture, someone else gives the labs/exercises, any relevant communication should reach those interested – CC the email to the relevant persons).

5.1 Web Pages

I make available all materials for lectures through the web pages dedicated to the lectures. These can be accessed through

`http://staff.fmi.uvt.ro/~adrian.craciun/`

The navigation through these pages should be easy. Please let me know if you have any problems navigating through the pages.

5.2 Mailing Lists

I announce updates to the web pages (such as new homeworks or lecture notes modifications, events, etc.) through **mailing lists** dedicated to each lecture, seminar, etc. These mailing lists should also be used for discussions related to lectures, exercises, labs, asking questions, etc.

The infrastructure for the mailing list is the one provided through the **e-uvt** portal. b

[5]Please use the email account provided by the University through the **e-uvt** portal.

5.3 Document Formats

If you need to send me electronically some document (report, homework, etc.) make sure this is in open format. I strongly prefer **pdf, ps, plain text**. If you have no possibility (which should not be the case) to do so, you may use other open document formats (such as OpenOffice/LibreOfice formats: odt, odp, etc.).

Under NO CIRCUMSTANCES will I accept closed document formats. To clarify, in particular:

NO "WORD" (.doc[x]) or "POWERPOINT"(.ppt[x]), etc. documents!!!

5.4 Direct Communication

By default I use an informal style of communication (I will address you by your first name), and I expect you do the same. If you feel uncomfortable with this, let me know and we will switch to the formal style of communication.

One more remark: I am not (at this moment in time) a professor. Therefore do not address me as such.

References

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