

# Sammanställning av Algorithms and Data Structures III 1DL481 61034 VT2024 (1DL481 61034)

Sammanställd	2024-03-26
Antal svar	9 av 25 (svarsfrekvens 36 %)
Tillgänglig	2024 - 03 - 03 - 2024 - 03 - 24
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Status	Avslutad
Namn	Algorithms and Data Structures III 1DL481 61034 VT2024
	(1DL481 61034)

# Information about Swedish translation / Information på svenska om frågorna

Om du behöver hjälp med översättning av dessa frågor till Svenska kan du klicka här.

## START OF QUESTIONS

Your viewpoints are valuable, and both positive comments and constructive and objective criticisms are welcome. Your criticism should be objective, constructive and always take into consideration individuals' integrity.

1. How would you rate the course's degree of difficulty? (Description: Here, you are asked how difficult you think the course was, taking its requirements and level into consideration. Feel free to comment on your answer.) (Medel = 3.8, SD = 0.8) (1 = Far too easy, 5 = Far too hard)



### COMMENTS:

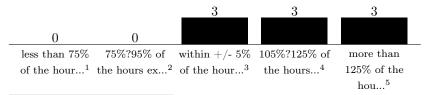
- The difficulty of this course is hard but it should also be expected since we are quite literally tackling the million dollar question P vs NP. One should expect more work effort than previous AD courses [3]
- As a Bachelors student taking this course I feel like I could have used a little more practice in logic, combinatorics and proofs. But the thankfully there were a sufficient amount of help sessions to get help from TAs and stay on track during the assignments. [4]
- would like to learn more on how to actually find / create reductions between NP-problems. That was a bit hard. [4]
- Lectures and informational content was digestable with some work, but assignments and exam questions generally not being based on CLRS or lecture material seemed

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arbitrarily difficult. The philosophy of "think for yourself" gets incredibly frustrating when most questions handle matters of argumentation and motivation, and there was no way to confirm the correctness of my solutions save for the few workshop sessions during the course. [5]

2. How did you perceive the course's workload in relation to its size (number of credits)? (Description: Here, you are asked how you perceived the workload, i.e. how much total time you invested in relation to full-time. Baseline: a 5-credit course given in a period of 10 weeks is expected to correspond to 1/3 of full-time, or 13.3 hours per week. Feel free to comment on your answer.)



 $<sup>^1</sup>$  less than 75% of the hours expected

#### COMMENTS:

- More than 125% during the beginning of the course but it evened out later on.
- This is a difficult question to answer, when comparing this course to High Performance Programming, a 10 credit course, the work load in AD3 was on par with that. I spend significantly more time on this course than other courses. It COULD be beneficial to extend the course to 10 Hp but it is without a doubt passable as a 5 Hp.
- The first assignment took roughly 55 hours, the second took about 30 as expected. I felt that I knew half of what was expected for the exam after 35 hours of study, so I think the expected 50 hours is a fair estimation. This course took almost twice as much time as other 5hp A1N courses, even with great deal of help from TAs and discussions with peers.
- The overall workload was not terrible, but the distribution was really bad. In the first 3 weeks we had 18 hours of lectures and an assignment that was expected to take 30 hours, which would require spending more than 13 hours per week. On top of this, the assignment took at least 30% longer for myself and everybody I talked to. Immediately after that we had another 30-hour assignment due 3 weeks later, but much of that time had to be spent working on other courses that had been neglected in order to have time for the first assignment.
- It's difficult to comment on, since the workload during the start of the course was way more than the end of the course. Some weeks exceeded 13.3 hours by far, making it difficult to keep up to date with other courses.
- I definitely went over budget on every step of this course, partly due to me working on solutions for 16+ hours only to be told to start over at workshop sessions.
- 3. I took a great deal of responsibility for my own learning during the course. (Description: Here, we want to know to what extent you took responsibility for your own learning, or if you e.g. relied more on the efforts of others. Feel free to comment on your answer.)  $(Medel=4,4,\,SD=0,7)\,(1=Disagree\ completely,\,5=Agree\ completely)$

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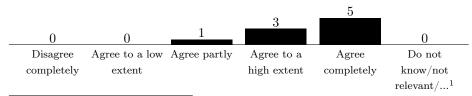
 $<sup>^2</sup>$  75%?95% of the hours expected

 $<sup>^3</sup>$  within +/- 5% of the hours expected

 $<sup>^4</sup>$  105%? 125% of the hours expected

 $<sup>^5</sup>$  more than 125% of the hours expected

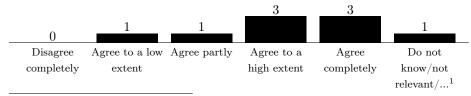




<sup>&</sup>lt;sup>1</sup> Do not know/not relevant/do not wish to answer

#### COMMENTS:

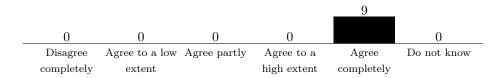
- Discussions with peers were essential when studying for the exam as there were no good solution set, and some problems were difficult to solve on your own. [3]
- Almost the entirety of period 3 was dedicated to this course. I've been missing non-obligatory events in other courses to wrap my head around this one. [5]
- 4. I contributed to other students' learning during the course. (Description: Here, we want to know to what extent you took responsibility for the learning of others. Have you, for example, taken an active role when studying with others, doing lab work with others, etc.? Feel free to comment on your answer.) (Medel = 4,0, SD = 1,0) ( $1 = Disagree \ completely$ ,  $5 = Agree \ completely$ )



<sup>&</sup>lt;sup>1</sup> Do not know/not relevant/do not wish to answer

#### COMMENTS:

- Me and my assignment partner were glued together for the whole course duration and shared knowledge in between each other. If you are a student reading this then do NOT under evaluate a good assignment partner, this is or should not only be a partner for the assignment but the whole course. [4]
- helped my team mate in the two assignments; we had a good collaboration and helped each other. [4]
- Part of my course work was making sure my partner was up to speed with everything as well. We worked as one during almost everything in this course. [5]
- 5. I feel that the treatment of students in the course has been good (e.g. regarding equal treatment or program affiliation) and that no one has been disadvantaged by the organization, content or execution of the teaching. (Note: If you feel that you have experienced or witnessed harassment or sexual harassment, please fill in the form at https://doit.medfarm.uu.se/bin/kurt3/kurt/26 You can do so anonymously. For more information see https://www.it.uu.se/about\_us/harassment\_information (Medel = 5,0, SD = 0,0) (1 = Disagree completely, 5 = Agree completely)



COMMENTS:

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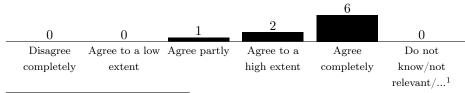
- [The teacher] take his time learning each students name. Highest grade [5]
- No problems. [5]
- Lecturer and assistans have been nothing but kind and welcoming. [5]
- 6. What do you think were the best thing(s) about this course? (Description: Here, you can highlight efforts, characteristics or parts of the course you thought were good.)
  - The assignments are incredibly fun and really gives you an in depth understanding about each topic (MIP, SLS, SAT, SMT)
  - A fun challenge with very interesting topics with applications in real world problems. Very rewarding when solving the assignments.
  - The assignments were a great way to learn more about the algorithms and solvers covered by the course. The lectures were great, and the guest lecture was also good, as it gave further examples of how the course content is used in the real world. I also liked the exam structure.
  - This course had the best teachers I've had in computer science at Uppsala so far. ALL the lecturers ([lecturer A, B, C and D]) were excellent.

    The TAs helped a lot during the assignments, the help sessions were great.
  - Both assignments were interesting and an gave valuable insights for the subject. Also the lectures were interesting and I really enjoyed attending them.
  - Interesting subject, professional teaching. Nice assignments. Good not having too many mandatory things.
  - Definitely the lecturer [name elided]. It's clear that he's got a burning passion for the subject, and wishes to pass that on to his students.
  - The main teacher and teaching assistant have been excellent: they were always kind, knowledgeable and respectful. The lectures have been engaging and fun, and the content has been very interesting. I also found that using exercises from the book for the exam has been very valuable: it really got me study and summarize the course literature in detail, practice many examples and has set clear expectations. This had a significant impact on my learning outcomes from the course.
- 7. Please provide constructive suggestions for course development. (Description: With your help, the course can be made better, and something that is already good can be made even more prominent/effective.)
  - The exam format is a double edged sword, as a student you know exactly what questions you need to study for, however, there are ~20-25 question, where each question could be very long, such that in reality, you mighty only have time to study for 15. If you are unlucky, an exam question you didn't study for could appear.
    - Me and a few other students discussed after the exam that an improvement could be to include 2 more Assignments tackling the other topics that are covered in the exams. I understand that this could be difficult due to the more theoretical nature of these topics, but at the same time feel that I have a much more in-depth understanding of the Assignment topics.
  - I think a workshop with TAs and/or head teacher would have been good when studying for the exam, to get help with difficult problems and to get a feel for the expected quality of our solutions.
  - I think the assignments would benefit from longer deadlines, as they both took more than the expected amount of time. When studying for the exam, I think that it would be a good idea to have a few help sessions for the excercises from the book. Some of the problems were very difficult and did not have any good solutions available online, so it would be nice to have somewhere we could get help.

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- The checker programs were binary-only. Just a minor detail, but it makes them a bit less portable.
- The excercises for exam preparation were incredibly difficult. It would have been more fair if we had been offered some proposed solutions. I think a workshop or lesson on some of these excercises (maybe chosen by the students?) would have been very useful. The teacher could then have provided us with some tips on how to solve the excercises. More hints on how to solve the assignments in general would have been more useful. If you're confused about the assignment from the start, you'll waste so much time trying to think of a solution that could never work.
- The start of this course workload is too much. The idea that we have all lectures in the beginning in the course is interesting but in practice in it doesn't work well. What happens is since there are 3° lectures a week there is a high chance for collisions in the schedule. Also what happens is that you have to put in full time for the course in the beginning since 3 lectures and quite a hard assignment. I had no time to actually revise the material and all benefits of going through all parts of the course in the early stage is negated. After the first assginment I was already behind in all the other courses which meant for the next part I had to focus on the other courses. Spreading out the lectures that is about exam subject means that you have the option to review the information so that you actually learn it rather then just trying to learn it for the exam later on.
- There were so many strict rules regarding unlawful cooperation and what to do how, that I was struck with fear of actually reaching out to course administration or fellow students regarding my work. This was also the case in AD2. Me and my partner were afraid of discussing the assignments with others for fear of repercussions, and the same for teaching assistans as "they're not paid to help us outside of scheduled sessions". Hence, we frequently got stuck and had to wait a week for a chance at help.
- While the lectures have been excellent, I frequently struggled to follow the material on the slides: they skip over important information to follow a step, note things too briefly or more complex than necessary. This is compensated by the excellent explanations of the main teacher during the lecture and the clear explanations in the course literature. However, even with notes from the lecture, I have not found the slides very helpful for studying the material. I personally would have found it very helpful if the slides provided an explicit summary of the introduced methodology or key take-aways for each topic (separating the introduced methodology from a specific example once, to understand which parts are example-specific and which are transferrable methodology while this is clear retrospectively, it was difficult to separate when seeing it for the first time during the lecture).
- 8. Overall, I am satisfied with this course. (Description: Here you are asked how well you think the course worked in relation to everything from teacher, content, forms of instruction, and examination to scheduling. Feel free to comment on your answer.) (Medel = 4,6, SD = 0,7) ( $1 = Disagree \ completely, 5 = Agree \ completely$ )



<sup>&</sup>lt;sup>1</sup> Do not know/not relevant/do not wish to answer

#### COMMENTS:

• 10s across the board. [5]

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- This was my favorite course I have taken so far. Except for the workload, the course has been really great. [5]
- Great course! Quite a difficult subject but well worth the time. [5]
- Assignment hard deadlines were a bit daunting, but the grading was humane, and the option to get a meeting explaining if something was missing was useful. [4]
- Course was incredibly difficult, but I've learnt a lot! Quite a rewarding course all in all. [3]

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