Meeting SAT Computer Science 26 April 2023

Present:

- Dan Witzner Hansen (HoP BSWU)
- Marco Carbone (HoP KCS)
- Therese Graversen (HoP BDS)
- Patrick Bahr (HoP KSD)
- Luca Maria Ariello (HoP KDS)
- Louise Meier Carlsen (Co-HoP BSWU)
- Claus Brabrand (Guest)

- Marius Thomsen (Student rep., BSWU)
- Theodor Christian Kier (Student rep., KCS)
- Sofie Kramshøi Nielsen (Student rep., KSD)
- Juraj Septák (Student rep., BDS)
- Simon Johan Skødt (Student rep., BSWU)
- Maja Styrk Andersen (Guest, KSD)
- Lena Winther Jensen (Guest, KSD)

- Trine Møller (Observer, Study and Career & Guidance)
- Mette Holm Smith (Observer, Prog Coor BDS/KDS)
- Allette Bjørn Bundgaard (Observer, Prog Coor SWU/KCS)
- Marc Kellaway (Prog Coor KSD) (Minutes)

Minutes:

1. Approval of agenda
Point 6 was merged with point 4 for the SD programme. Apart from this, the agenda was approved.

2. Approval of minutes from meeting 29 March 2023
No comments for the minutes received within the 10 working days period. Minutes approved.

3. Information
Claus Brabandt joins as guest for point 5. Trine Møller joins as observer from the Study and Career & Guidance instead of Sara.

4. + 6. Update from study programmes (Students)

SWU, 1st year
Marius: I have received complaints that the written exam in *Algorithms and Data Structures* is placed before the submission deadline in *User Experience and Web Programming*.

Dan: It is also possible to hand in earlier, so you can look at this as a way of giving more flexibility and possibility for planning your time.

Marius: This might have been compounded by the handout not being launched clearly. It was not clear enough what we were supposed to do, but as the CM had family illness and had to cancel classes, this might explain the issues with the information. Another thing: The lectures in *Algorithms and Data Structures* should be recorded. People also are unsure of how the exam works in this course, as the old exam sets do not have an answer sheet, and it is not clear how the questions are weighted for the exam.

Dan: Recording is entirely up to the teacher. We do not even have it as a requirement to make the slides available, though it is general practice. And I do understand the teacher, as recordings have all kinds of side effects. Just as the teacher should meet the students where they are, the students should meet the teacher where he or she are – in the lecture room. And I think it is the same regarding the answer sheet.

Lena: One of the issues with this particular course might be that it is very needed to take notes during lectures, so this might be an argument for having video to help with this afterwards. But I know that other videos related to the book are available.

Marius: Yes, but these videos and course lectures are different.

Dan: Have you asked the teacher?

Theodor: He always says no!

Lena: You can find the answer sheets for some of the old exams in the exam sets we are provided with.

Marius: Regarding the *First Year Project* – the lecturer needs to make it her own course, and not just base it on Troels' videos. It is not always clear how we have to use the subjects in the project. People are also not overly fond of how she lectures, as it seems like she is not so used to it. It has gotten better during the course though.

Dan: I think the purpose of the *First Year Project* is to take the things from the first year of the programme and lift them to a higher level, so I think to some degree it is ok for the teacher to say it is up to you how to implement things.

Marius: The videos from Troels do not always relate to how the course is taught anymore. There are factual errors regarding what we need to do. I think she needs to reformat those videos.

Dan: I agree. Ideally this is what we want to do, but taking over a course you need to get into all of the details, so it takes a ridiculous amount of time to make the material your own. This is the first time the CM runs the course, so it will probably run smoother the next time.

Marius: *User Experience and Web Programming* has attendency problems, as people feel the lectures are too shallow.

KSD
Lena: We have a form where our fellow KSD students can hand in feedback and issues, and one thing we

have been made aware of is, that some students feel there is a misalignment in the description and the actually design of the programme – they have thought that the programme is more about designing rather than programming software. There are still also a lot of issues with workload. Second semester is especially exhausting. *Algorithms and Data Structures* should be 15 ECTS – the workload is far too big, and lot of additional hours for activities in study groups and labs are needed also to follow the course.

Marius: I hear the same thing from the SWU students.

Dan: Can you send an email and break the numbers down to Patrick? Then it might be easier to look at and talk about.

Therese: Regarding *Algorithms and Data Structures* – we have also been discussing this on the BDS programme, and I think it actually seems to add-up to the 11 hours you are supposed to spend, since there is less preparation than in other courses, and the mandatory tasks should have been covered in the lectures.

Lena: In both my own experience and the experience from people I have talked with, there seems not to be alignment between what the mandatory assignments expect of you and what we are taught in the lectures.

Maja: There is also a discrepancy between the two mandatory courses on the second semester. There were a very different number of people passing the courses last year, and the average grades were also different, with both more people passing and a higher grade average for *Algorithms*. I think it signifies that people spend more time on *Algorithms* compared to *Database Systems*, which is a shame for both courses. I can understand from older students on the programme that this has also been the case previous years.

SWU, 6th semester
Simon: I am also doing a form and have two points. The first is that the exams are scheduled too close together and too close to the submission deadline for the BA-project. This could be looked into.

Allette: The BA projects are already considered in the scheduling, but there are a lot of restraints, and as most electives on BSWU are shared with the KCS-programme, we also need to take this into consideration in the scheduling.

Marc: Some Head of programmes also ask us to make space between the end of the courses and the exams, but as the framework we can schedule within is fixed, this means the exams will be placed closer together. As Dan also mentioned earlier, the intention is not necessarily that you should work on everything up to the deadline, but to give you the freedom to plan what you want to spend time on when.

Simon: My second point is that the workload in *DevOps, Software Evolution and Software Maintenance* is really high – especially in the beginning. People like the course, but are not able to do all the work within the hours set for a 7,5-ECTS course. This needs to be addressed. It has also been mentioned to the teachers.

Dan: You say the workload is especially high in the beginning. Would it still be bad summed up for the whole of the course?

Theodor: I can second this for the MSc version of the course, and would estimate it would still be bad - around 14 hours of work needed pr. week as an estimate. Most groups are several weeks behind on what they need to have done at this point. The teachers are understanding and good to adjust, but the workload is still too big.

Simon: I don't have much other to say, as I haven't gotten much feedback. The exam dates are very close together. The teachers are good.

Therese: I second the point that exam dates are too close together – I think Marco has also raised this point – especially for programmes that have three written examinations. I think there is a structural problem. That said, many people should also work harder. I have talked with people who have worked quite less than the required amount of hours.

BDS
Juraj: I have not received anything, so assume that all is good for now.

5. Presentation of results of a student research project on struggles and challenges of first-year students in Software Design

Sofie: I will try to make the presentation brief, since I have already made a summary for those who did not have time to read everything. The main points are this: The stress level is very high. Over 50% of the students say that they are "very stressed". I know we have been discussing this a lot in my time at SAT CS, but it shows that it is not just a current issue, but something prevalent at the SD programme. The report also finds that people working outside of their study are not more stressed than people not working, so we can conclude that the stress-level is not related to work on the side. Those with no previous experience within the field are generally not working on the side, and generally more stressed than those with experience.
The report also finds that the high demands of the courses in regard to mandatory activities make students learn worse by heightening their stress level. What we can gain is that the SD program is harmful to student wellbeing, as well as the high workload harming students learning. So, we really need to address this workload – coordinate better between courses, perhaps having less mandatory assignments, or the same amount but have some of it be optional. I feel bad this keeps coming up, and that I haven't been able to do anything about it.
As a final point – when I look at the Employer Panel Report on the agenda later at this meeting, I can see that a lot of students on the SD programme do not finish within the two years, and one reason for this might be the workload. Either because they need to spread out the study to lessen the workload, or because they simply cannot pass all courses within the two years.

Claus: I have supervised the project, and think these conclusions are valid to the extent you can extrapolate the findings.

Louise: I have also supervised the project, and can add that a high number of students were participating in the survey.

Marco: Regarding the mandatory activities: As head of programmes, we are responsible for the students being educated and passing the exams. We have been experimenting a lot with it, and it is really clear, that if you do not have mandatory activities, less students pass the exams. Another thing: You talk about stress. How do you measure it? And isn't this very subjective? Is that being considered in the study?

Sofie: This is taken into consideration in the study - there is information about it in the summary. I agree that it can be an issue measuring what people say themselves, but still think it shows that there is a problem, when so many people choose "highly stressed". Regarding mandatory activities there is a lot of anecdotal evidence, but what I think is needed is to have some proper evidence. Nynne (previous member of SAT CS) had a course where assignments were not mandatory, and here this did not result in lowered grades. What we need is a more structured test of this.

Maja: I think it is a shame this also becomes a discussion of either all or none. We need to make the discussion less binary and talk about things like the number of assignments.

Marco: It is difficult to compare as the hardness and size of the assignments can differ a lot from course to course.

Lena: There are still a difference between the courses. I am not saying we should drop all mandatory assignments, but it should be investigated how it works best, for instance by not making them all mandatory or not making you need to pass them all. In *Algorithms and Data Structures* we have been told that we have to pass more than was actually needed to pass. The teachers changed it midway. It was the same thing in *Mobile App Development*. I think it is on purpose, as I can understand it also happened last year.

Marco: Why is it bad?

Lena: Because this puts bigger and unnecessary pressure on the students. If we get false expectations from the lectures on what we need to do, then we put a higher expectation on ourselves, which leads to higher stress levels. We also got this on our form as a suggestion: Just publish at the start of the course what we need to do.

Marius: I agree it is disruptive to shift goalposts like this. Mandatory assignments usually are big, and often they collide with their deadlines. If we could have some of them optional, that would make it much easier to handle. I have also been taking courses with no mandatory activity, where the average grades are still high. But if we could get an overview of them early, this could help you plan and prepare mentally. It is more stressful going blind into a situation.

Theodor: Perhaps we should make mandatory assignments a point for another meeting?

Patrick: Thanks for sharing! It is very helpful to get an overview like this. The stress numbers seem to be consistent with what we know from the students' self-reporting of working hours. Regarding the mandatory assignments: It is very difficult to investigate outside the context of the individual course. For *Functional Programming* we tried to improve this by making the exercises optional, but also by forcing people to do the exercises individually instead of in groups, to ensure progression for all students on the course.

I was a bit worried when I saw the thing about false advertising. I vehemently disagree on this. KSD should also be a programme for people with no experience, but people with experience will of course be less stressed. I think this shows we need to do more. We are already starting to address this by doing things like BootIT and BootMath, and we might need to do more of this.

Dan: Thank you very much for sharing. I have a few comments: Regarding the issue with self-assessment of stress-level – there is a big difference between being busy and being stressed. And regarding the mandatory assignments – the expectation is that these should not necessarily be perfect, but just display a sufficient amount of understanding of the given subject. As long as this is within the hours of the ECTS model, it is fine. If it is outside of this, it is of course not.

Maja: Is it possible perhaps to get data on the number of students getting doctors notices for stress?

Marc: SAP is working on making some kind of statistics available for the applications for exemptions, but it will necessarily be very broad, as it concerns personal data of a sensitive kind.

Claus: Just a comment on Marcos's question on how this was measured. The survey was not invented from scratch but derived from studies of similar material. I agree there is a huge difference between clinical stress and feeling stressed, but the study did find a very significant correlation between less experience and the level of stress.

Patrick: But is this surprising?

Claus: No, but we might want to work more with this. People with outside work appear to be less stressed, but this might be because they facture this outside work into their answer. But we will try to study this better, and also try to figure out the causes of drop up. We want to start with SWU, as this is programme we know best, but will broaden this out further.

Marius: I think the way lectures communicate information om mandatory assignment are very passive. Students do not read course descriptions since most information is also findable elsewhere. It can also be hard to find, and then it is just the student's obligation to find it somewhere. Perhaps we should try to move forward to actively communicate directly to the students.

Theodor: I think it goes both ways. The students are very bad at reaching out to the professors. And a lot of the time the information is already written somewhere.

Trine: The question is also whether it is the courses or a self-inflicted question. It is important we look into this together as a university, and talk about expectations. For instance, failing can be fine and a way to learn to, so it is often a question of mutual understanding.

Lena: I am speaking on my own behalf now, but I do believe we have a personal responsibility for our learning as students. The information should of course be available, but it is our own responsibility to find the information and prepare. For instance, the spring schedule and course descriptions are already available now, so I can plan from this set my expectations for the courses. So, this is also a question of personal responsibility.

Dan: I agree, but also think we have something in our luggage, as students coming directly from high school might have the expectation that things work the same way at the university. We need to be better to communicate this, and also that during your study, you learn how to study at the university.

Sofie: Thank you for the discussion. As a closing remark: I have taken two different BA degrees before coming here, and never ever experienced the stress level I've experienced at the SD programme. But this is just my point of view. I hope we can do more about this.

Marius: I agree. This is also my experience from my previous BSc study. I like it here, but things are structured in a more stressful way. The research project found that people with less experience were more stressed, but I am not sure about this correlation, as I feel even with experience, it is still more stressful here. Courses at ITU are more rigid in how things are communicated, whereas at Physics, it was mostly analog with the submissions and similar.

Dan: So, it is more about how you submit things, rather than the overall structure?

Marius: Overall it is more difficult to grasp the structure here.

Theodor: This might be a point for a future meeting.

7. Programme specific employer panel report

Mette: Just to give you some background: We have an employer panel shared for all programmes in the CS department, which meets twice a year with the heads of programmes and the head of department, and they also do a report every year. We use their input if we want to make adjustments to a programme, or when we plan to make new programmes. So this point is mostly thought of as information to you on how our employers panel sees the programmes.

Marco: This is actually very nice – we get to discuss programmes overall. Would be nice to discuss this more in SAT also.

Marius: We could also have a discussion on SAT itself and the focus of SAT.

Allette: If someone wants to put something on the agenda, we need to you write the secretary with a heading and a preferably a few lines on what you want to discuss.

Marc: I have moved the Employer Panel Report to the next meeting. For the other points mentioned in this meeting, please write me, if you want them added to the agenda for an upcoming meeting.

8. AOB

Mette: Remember that the course evaluations are starting next week. Spread the word!

SAT agrees to move the meeting planned for Wednesday 24/5 to Thursday 25/5 due to a written exam on 24/4.