ISSN 3006-6301, Vol. 3 (No. 3) 2026

# Supplementary file_CEQ

Figures CEQ_A–C show the results of course evaluation questions C1, C2, and C6 (cf. Table 1) for the period 2021–2024, using a Likert scale ranging from 1 (completely disagree) to 5 (completely agree). The complete set of student comments from the course evaluations and the corresponding examination evaluations is subsequently presented for each year.

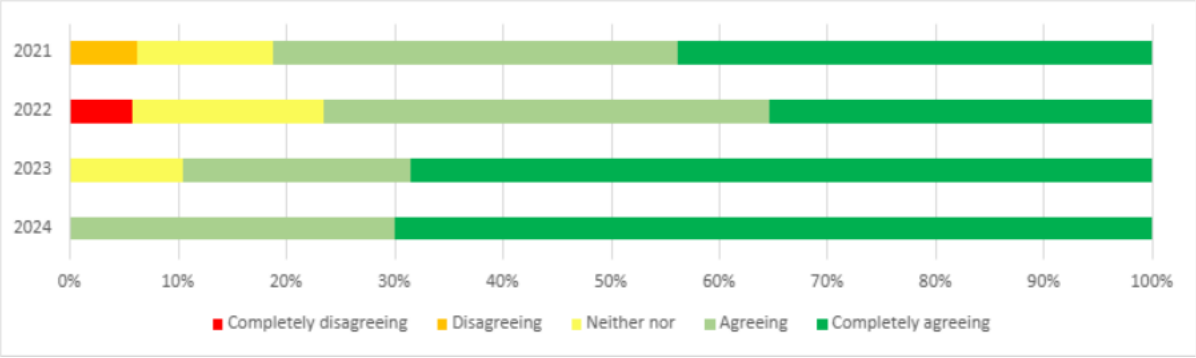



Figure CEQ_A. Evaluation question C1) I have learned a lot in this course. Results are based on 16, 17, 19 and 10 students in 2021, 2022, 2023 and 2024, respectively.

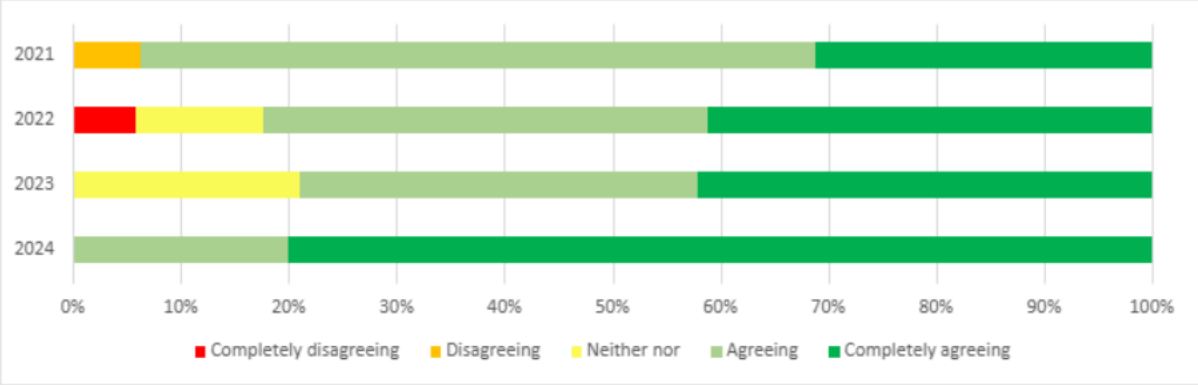



Figure CEQ_B. Evaluation question C2) The teaching activities in the course align well with the course's learning objectives. Results are based on 16, 17, 19 and 10 students in 2021, 2022, 2023 and 2024, respectively.

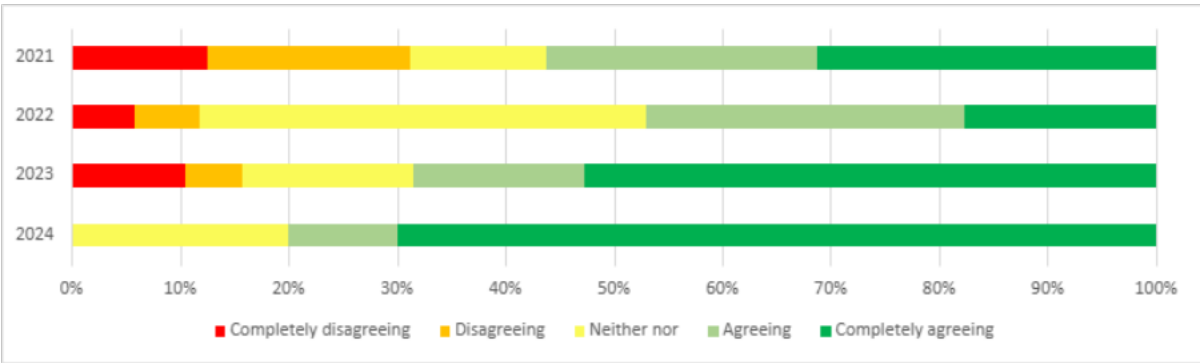



Figure CEQ_C. Evaluation question C6) I have had the opportunity to receive feedback on my academic performance during the course. Results are based on 16, 17, 19 and 10 students in 2021, 2022, 2023 and 2024, respectively.

## Evaluations from 2021

In the comments for the course the students wrote:

- Really good course, maybe the fish fillet case was a bit forgotten towards the end, but it was still very good at introducing many of the initial calculations one needed to know.
- It is a good idea to have an ongoing case that is revisited throughout the course, but it could be more relevant and include calculations that there is time/opportunity for one to do oneself, instead of it being done on the blackboard. More time to work undisturbed on the given tasks. Often, we only had 10-20 minutes, during which things were continuously said to the group, so we didn't get a proper chance to get into the task.
- Quite a fine course. I fully understand that we should not have the answers to the tasks given on a silver platter, but there is no way to check if the tasks are calculated correctly as a list of answers is not uploaded, which we have asked for. Furthermore, there has been a lot of general confusion during task solving. When there have been questions, you both have sometimes been a bit busy and not heard what we were asking about, and then we calculate based on that, and afterwards during the review, we are told that other factors should have been applied. This has created a lot of confusion.
- I understand that you say there is no time for feedback, etc. But a multiple choice, posted with about 10 questions 2-3 times during the semester, I still believe would be more than a good idea. Multiple choice, I can't see, takes a long time to "rate" through as calculations, etc., do not need to be reviewed.
- You have been very good and precise in explaining the expectations and goals of the subject. The hardest part of the subject for me has been getting an overview of all the different terms and formulas, as there are really many of them, and they are used a lot across the board. Here, it would be nice to have a few multiple choice tasks.

Comments on the exam, E1 cf. Table 1:

- It was just as difficult for exams as for classes. The exam tasks were really challenging; it was physically impossible to answer everything within 4 hours! There is far too little time for calculations in the course. We were by no means trained for such large tasks.
- There is no time at all to calculate everything required to solve the problems and then write it out in Word. There was simply no correlation between workload and exam time. During the classes, we practiced subtasks, but the exam felt like an entirely different project.

- I have never been so negatively surprised by an exam. Many of the tasks seemed much longer compared to the teaching; the only comparable aspect was, of course, the formulas, but the codfish project.
- The tasks done in class were child's play compared to the exam tasks. The exam felt very different from the course teaching—probably the most challenging and frustrating exam I've participated in.
- Some of the questions (two) were very easy and straightforward, but they required so much writing, which cost both time and energy. There are questions that almost assume you'll make a mistake and provide an easy solution. I haven't seen that before, at least not of that kind. The activities in class bore no resemblance to the exam questions. The tasks we did during the 13-week period were much easier and more manageable.
- One thing did match between the exam and the literature book: plenty of grammar errors. Unfortunately, that didn't help with concentration.
- The quantity of tasks combined with their difficulty level in relation to the tasks worked on during class was problematic. The difficulty level was high since we had to both describe and calculate.
- The difficulty level and the number of questions in the exam did not match at all. It felt completely impossible to get through all the questions. The exam did not align with the course's difficulty level; it was too difficult, with too many tasks. It was incredibly uncomfortable to have prepared with all the provided material and feel like you were learning an entirely new subject during the exam.
- The exam felt like being taught how to walk during class and then being asked to sprint during the exam. The exam was much harder than what the teaching had led up to.
- I'm in shock over the exam. There were so many tasks that I felt completely overwhelmed and demotivated because I couldn't possibly complete them all, even though I had a rough idea of how to approach them. The difficulty level was at the high end and only partially aligned with the teaching. I've done all the tasks from the book and PowerPoint, and the exam tasks didn't quite match them. They were more difficult. Having only 4 hours for all these tasks is utterly impossible.
- While the content fit well within the class time, the quantity, length, and difficulty of the tasks left insufficient time to think through each one. There were far too many subtasks given the time available. The difficulty level was much higher than what we had been taught.
- These are the topics covered in class."

Comments on the exam, E2 cf. Table 1:

- The content of the tasks was far too complicated, with many subtasks, and the overall volume of tasks did not align with the time allowed for answering.
- The exam was too long and difficult compared to the tasks we had during the course. The time it takes to write down in Word, Excel, or similar tools doesn't seem to have been taken into account.
- There were simply too many tasks for a 4-hour exam. The difficulty level was extreme and went far beyond the learning objectives of the course and what we had learned in class.
- While the course aligned reasonably well with the learning objectives, the exam took it a step further and disrupted that alignment.
- There's no doubt that the content matched what we were taught. HOWEVER, this was overshadowed by the fact that it was too difficult.
- The expectations for what we, as students, should be able to accomplish in 4 hours were set unreasonably high. This should be addressed urgently—either by reducing the number of tasks or maintaining the same number of tasks but making them easier

General comments for the exam:

- The exam was far too difficult, and there were too many tasks given the time available. Additionally, there were quite a few cryptic questions where you had to sit and think about what was actually being asked. This can be stressful, especially when you're already under time pressure. Now, I'm in my 7th semester, and this was the most challenging exam I've ever taken.

The difficulty level of the tasks would have been fine if we either had more time or fewer tasks. But with the amount of time and the number of tasks given, some of the tasks should have been easier and more straightforward.

- I was very disappointed with the exam tasks because I didn't have time to demonstrate my knowledge in other areas. It would be better to have fewer subtasks, allowing us to solve the remaining tasks, which reflect the course program. Furthermore, we haven't had the opportunity to practice with old exam tasks, which would have allowed us to assess our time management capabilities.
- Nina should talk much less and let us calculate many more tasks ourselves—thank you! If this is the exam, then a whole project should be assigned per practice session.
- I thought there were too many tasks for the allotted time. One of the tasks even required calculating 5 values just to arrive at the answer the task wanted. (For example, the number, Gz, Delta^0.33, the displacement thickness, and the Nusselt number, to be able to calculate h). The entire subject should have been an Excel exam. There simply wasn't enough time to find and calculate things and note down the formulas and units.
- Having tasks similar to exam questions would be helpful. More tasks would also be appreciated. I realize I'm moving into course evaluation territory, but there weren't nearly enough tasks for self-study. Moreover, the tasks we did during class were constantly interrupted after 15-20 minutes because the instructor realized they were running out of time.
- Provide more similar tasks for exam preparation. Additionally, it's suggested that if the exam length remains the same, it could be a multiple-choice format.
- The combination of task volume and difficulty level compared to what we worked on during class is challenging.
- We're expected to provide the formula (possibly with a reference), the formula with inserted values and units, along with the result. It's simply impossible to complete so many tasks within the given time.
- There are too many questions to cover, especially when calculations are involved.
- It didn't seem like a well-constructed exam. Many of the calculations took a long time, even when you knew what to do. In one of the tasks, for example, you had to fill out the rest of a table provided in PDF form. You either had to make it writable or recreate the entire table, which was time-consuming. The format could have been better thought out. While many tasks seemed to require Excel, there had been a strong emphasis on text-based submissions.
- The exam was incredibly time-pressured and challenging to calculate. Especially under time constraints, it was an uncomfortable experience. We weren't adequately introduced to how the exam would proceed, the number of tasks, or how closely they resembled the provided exercises—turns out, they didn't match at all.
- Exams don't necessarily have to be pleasant experiences, but the feeling was that finishing wasn't intended. One suggestion would be to make it shorter and perhaps more straightforward, so you don't have to search the entire book for an equation.
- Either reduce the number of tasks or lower the difficulty level. While I appreciated that the Excel sheet was prepared for Task 3, there was still a lot of time spent writing out formulas and creating tables.
- After the exam, we were left with a sense that we might as well have taken a blank exam. It felt like a mix of resignation, irritation, and, most of all, indifference. As part of the first cohort in this course, more attention should have been given to how the exam would look. Perhaps similar tasks during the course would have prepared us better. The exam we all witnessed came as a shock and left us all quite unprepared for its difficulty level.
- It seemed like there were far too many tasks and overly lengthy ones for the allocated time. Despite the extra hour, I still couldn't review all the tasks. Overall, the task set was fine, with understandable questions and subquestions

## Evaluations from 2022

In the comments from the course the students wrote:

- I think it's a very good way to learn by doing tasks continuously.
- The curriculum is very large, it would be nice with a collected formula collection that you do not have to make yourself but instead get one handed out so you know it does not contain errors. Many errors in the book we use and also some in powerpoints make it difficult to learn.
- There is a lot of homework, which is fair when the textbook is short. But there is just really really a lot in the tasks that need to be done at home. One would wish there were clearer expectations for the exam, have no idea what to expect.
- It would be a huge help to have answers to group exercises available before 12 o'clock, if you were to take the lecture from home.
- It has also worked well to present and work with the Gantt chart at the beginning of the course and to finish with a similar task.
- I think it has been very educational, though very heavy with a lot of calculations. In the end, it became very difficult for me to keep up and keep my head cool. But Bo and Nina are again good at explaining the professional, it just became too much for me to keep up.
- Super good and exciting course.
- I think it works well, that in the hours there is a switch between lecture and calculation tasks along the way.
- Good textbook.
- It is difficult to change the course in relation to the curriculum and tasks. It must lie as it does now as it is the way you get the most out of it in relation to the first few weeks. Here we unfortunately wasted some of your time because we had not fully entered the curriculum made the tasks, were in doubt but did not look forward.
- So positive you changed in the curriculum so there is theory and task calculation.

Comments on the exam, E1 cf. Table 1:

- I must honestly admit that the exam was incredibly difficult. I had beforehand done all the tasks from the group calculation and set it up in EXCEL, but I still managed to be very doubtful about the tasks in the exam. I do NOT feel that the current form of examination is a proper way to test one's proficiency in the subject. The form of examination should be changed, to be honest. The teacher's proficiency is not in doubt. They have been incredibly supportive and good at teaching.
- The number of questions in the exam did not match the exam time of 4 hours at all.
- Yes and no, we have calculated similar tasks in the teaching but we have not calculated tasks so complicated. We have mostly taken it in bits and when you then have a task you have to do 8 different things in to reach the final answer you easily get confused about whether what you have done is correct. A wish is that you go through more tasks like the exam set. The two cases, chicken and cod, were fine but several with many steps as for the exam is a wish for the future. Have we learned to calculate backwards from the Gantt chart which was included in the exam this year? I only remember we have calculated from numbers to Gantt but not from Gantt to value.
- The exam this year has been as expected based on what we have learned to calculate in the lectures.
- The tasks were a review of the curriculum, but the tasks were formulated a bit complicated. There was no correspondence between teaching and questions given for the exam. The exam hit the curriculum and when I answered the exam I also felt that I understood the subject. But the assessment of the exam I strongly disagree with, as almost 80% of the team has failed and only one participant has managed to get 7. For me, it is a sign that there is something either in the correction form of the exam, or the corrector's expectation of the answer, which is completely wrong.

- Way too much content and way too many questions, which makes it very difficult to be able to reach all questions.

Comments on the exam, E2 cf. Table 1:

- I was extremely confused by the form of the exam. Plus, it's hard to calculate in EXCEL, as you have to enter formulas from previous tasks. The EXCEL part for the course side should only be used when calculating larger amounts of data. A good example of where it is smart to use EXCEL is for mass fractions and decimalizations/microbial mortality.
- Same as before.
- It's about decoding the important information. But the tasks were described as promised through the course. REMEMBER to read the task before you ask questions, because all the information was there.
- More questions were on topics that had only been mentioned briefly and not thoroughly reviewed.
- Again, I think this curse is one of the hardest courses. The exam level could be more achievable, i.e., level of difficulty. Hard to be able to reach all questions in good time.

General comments for the exam:

- I would probably take the opportunity to look towards oral examination forms, or use a case that groups should be examined in. Because the current one seems very confusing. It was a marginal small part of the participants who left early. Several of my fellow students also thought the tasks were very doubtful. If it were to be a written exam, then a possible multiple choice could also be an option. I still want to emphasize that the teachers have been fantastic teachers. They have really made an effort for us to learn the material.
- It's not 100% fair to give 4 exam tasks that are connected, there were some tasks you couldn't proceed with if you didn't manage to calculate the previous one. In last year's exam set you had given values one could calculate further with if one got the wrong result or if one couldn't calculate it. This year one was forced to stick to the same task for a long time because otherwise one could not proceed. I know from many they were stuck for a long time in the same tasks.
- I think the changes that have been made compared to last year have given me more understanding. Especially with the time we have to calculate, which made the course fun.
- Good exam, but again complex question, if I had had one more hour I would have managed to answer the whole set.
  The exam is as promised from day 1, you are in-depth, and if you have read up from home then you are guaranteed to be able to pass the exam so I don't feel there are a need for any improvements. You keep what you promise, which is good.

  Maybe the students with extra time should be moved to another room? We might have made a bit too much noise when we were finished which could have affected the others' exam.

- Too many things had to be derived and were not indicated which made the calculations unnecessarily cumbersome, generally cumbersome with all the excel files, a formula collection had been suggested several times in the class but was rejected by the teacher even though this would have been good for the exam.
- Really a bad exam, especially when you go in and look at how the exam average is. It's the majority that has failed, which should give the teachers food for thought about whether the exam might need to be changed or if the questions should be rewritten.
- The assessment of the exam is too hard. I have made a great effort throughout this course and feel I have understood the course well, and the grade does not reflect this.
- The teachers are very good and skilled. The problem is more the difficulty of the subject, the exam and how much one should be able to achieve in 4 hours.

## Evaluations from 2023

In the comments from the course the students wrote:

- I have spent many more hours on this course. Especially after assignments have been added. It's not a criticism in relation to the homework, but a lot more hours have been spent on this course than expected.
- A lot of work, with exam questions, cases, and assignments as well as preparation. But it provides a good insight. Cool that the assignments count towards the grade.
- The most exciting course/subject I've had since kindergarten, absolutely fantastic.
- I think the course is incredibly well set up with the tasks you have to do in class and the assignments and that they can be used for the exam questions we get. It's nice with some well-executed solutions to the tasks during the course, so if you weren't quite sure how to solve a task, you can get help and thus learn it because the solutions are posted on Learn. Super good tasks, however, I think there is too little time in class to solve them and some of them are very difficult - they take much longer than I think the teachers think they take. Too little time for tasks in class and it can be very stressful. It would be nice with more time for them.
- I think it's a really exciting and well-structured course with good content. I could miss a better overview of the non-stationary heat transmission, in the same way as we got about the stationary heat transmission. The exam form is really exciting and I learn a lot from it, but the preparation is also very time-consuming.
- Good and difficult course. It has been great to have to submit assignments on an ongoing basis, so you have been able to practice calculations for each week's curriculum. I might miss a little more understanding of how the processes take place in the different machines, so you can see it for yourself when you calculate.
- Super good course that is concrete in its goals and tasks along the way.
- Good course! Even though the assignments take time, it's a really good exercise, and very motivating. Judging from the number of hours spent on the course, I probably spend more than 9 hours, especially if the cases for the exam also count. However, I think it is necessary as the curriculum is large, and it is a good way to learn it.
- Requires much more time than 5 ECTS points. Two large cases, you spend time finding data. It would be nice to relate to just one case. There are also different cases in class in addition to the two large cases. Why not work with one of them to get a good understanding? Assignments are really good at getting you to understand the material, and you can get into it. You don't get to do all the calculation tasks in class and the teacher often says "you can do that at home", because there isn't enough time to get them done in class. The problem is that when you don't have enough time to reflect on what you have done in class, it means that you haven't learned anything. We had a different teacher in week 3/4, where you had more time for calculation tasks. I definitely think I got more out of it, instead of stressing. Solutions are reviewed, which is so nice, but sometimes they are revealed too quickly. The teachers are super good and skilled. Difficult to assess what the teacher expects you to be able to do. For the exam questions, it is incredibly broad and not sufficiently delimited. We are incredibly nervous to know what the expectation is. Assignments and exam questions overlap the other course's assignments, which is a big problem. The course should be on the 5th semester or another semester. It is too demanding to have on a tight semester with other difficult subjects.
- I think it's a very exciting course, however, I and many others think that the curriculum is way too big. You can clearly feel it because you can hardly breathe during class. There are massive calculations from start to finish. You almost get burned out. Way too short time for a lot that needs to be calculated. I think future students would benefit from getting more time to calculate everything in class or the content should be cut down. It's almost not humanly possible to keep track of the calculations/theory when it goes so fast. Others and I have sat together at least 2 days a week to be able to work with the subject and it's still not enough. There is a lot of focus on calculations, but I think the theoretical part becomes a bit superficial, so when I ask my fellow students what *Nu* number, Biot number, etc. mean… There are none of them who can relate to

them theoretically, but only mathematically. And of course, it will influence either how much you have to get into the theory part before the exam, or your grade will be affected. All in all, I think the course is mega exciting and relevant, however, you end up being lost due to a huge curriculum with so little time. Group calculation and a help teacher would be beneficial for future students, as the content is complex and contact with the subject is only once a week, i.e. with a teacher present. All teachers have an enormous good academic background and can answer everything you are in doubt about. Nothing against teachers, but the curriculum really needs to be reconsidered, otherwise, most students will pass the course with a superficial knowledge instead of thorough knowledge.

- While a lot of emphasis is placed on the calculations in the teaching, the theoretical part is often overlooked or treated superficially. This is reflected in students' difficulties in understanding theoretical concepts. Not that the theory is not reviewed, but because all focus is on the calculations, you forget a bit to put it together with the theory. In addition, students point out that the course requires more time than the allocated 5 ECTS points. There is frustration over the scope of tasks and lack of time for reflection in teaching, as there is a lack of more time to solve the tasks before a solution is shown. However, there is great praise for assignments that help understand the material, so I really feel that the subject should have assignments so you are forced to understand the material. The teachers' competencies are generally praised, but there are concerns about a lack of clarity about the expectations for the exam. Exam questions are considered to be broadly formulated and not sufficiently delimited. Overall, the evaluations indicate the need for a revision of the course structure, including an adjustment of the curriculum, better balance between theory and practice, and clearer communication about the expectations for the exam. In addition, considerations about the course's ECTS points and placement on the semester should be taken up to ease the study burden for the students, as the 3rd semester is a very demanding semester in the education.
- I thought it was good with the assignments, but it would be good to get the corrected sheets handed out at the end of the course, so you can check errors yourself. There is not always enough time to correct it in class hours.
- Good course. I think that in many ways it poses some good challenges to understand the real world. Tasks are easy to engage in.
- That there are assignments every other week is quite a lot when it's only 5 ECTS points and then you don't get feedback on the assignments now when you spend so much time on them you could give feedback. Because when you then go back to the assignment you don't know if it's right or wrong and you can use it. if you set the exam questions out early you can also give us time actually to focus on them without thinking about an assignment in the meantime.

Comments on the exam, E1 cf. Table 1:

- Most of the curriculum was covered during the study for the exam. I don't really think we covered what we learned about kinetic (so maybe remove it from the curriculum).
- The difficulty level is very high for a 5 point course. There's a lot of work in preparing 10 assignments and 10 powerpoints, only to use 1/10 of all your work for the exam.
- In my opinion, it makes much more sense to have an oral exam in this course, as it's about understanding the process and the use of the different formulas.
- I found the exam much harder than the assignments we had worked with. Some of the tasks were similar to assignments, but there were too many new unique cases.
- I think that 10 exam tasks were a bit over the top. (Both in terms of preparation time before the exam, but also just having to remember all 10 tasks for the exam, that's quite a lot)
- As a repeater on the course, the exam felt much more equal to the teaching we have received, which was not something you could say about the exam last year. Generally, the assignments during the course have provided some tools that we did not get with the crispy cod case last year.
- The cases were very similar to some we had done before. I felt that many of the questions were on the difficult end.

- Everything the exam contained, the course also contained.
- I learned a lot during the exam period, but the workload was much larger than what is estimated for 5 ECTS.
- There have been many changes in the course - both positive and negative. I thought the form of the exam was good because I could explain what I had calculated. But again, for those who have worked in groups, I think it has been very irrelevant as I have heard many have not understood the curriculum but just read what group members have written for them and thought it easy to pass.

Comments on the exam, E2 cf. Table 1:

- I think it's great that one is judged on both the oral exam and one's submissions throughout the course. I think there was a big difference in the tasks one could be given, and that it was quite unfair. Some tasks had 3 questions, some had 8???
- The content was appropriate, but the syllabus was too large. I think the new exam format seemed okay.
- The exam format worked fine, but it was very overkill with 10 exam tasks! It would be great if we had 15 minutes of preparation after drawing questions, to familiarize ourselves with the task we had drawn and the calculations we had used. I definitely sat with 10 tasks in my head during my exam and tried to remember what exactly I had done in this task and not mix them up.
- The new exam format is more forgiving than last year, which I think is reasonable since the academic load of the course is so high, for a 5 points subject.
- The exam covered the entire syllabus and with several repetitions.
- I think the idea behind the exam format is fantastic, and force you to use all fields in the course. However, it is a bit strict that one does not have 5-10 minutes to prepare for one's presentation, as it is very heavy to remember 10 completely unique scenarios at the same time and then with a click be able to tell about one of them.
- The teachers are skilled, but the subject is too large and should normally have 15 ECTS.
- The way the exam was arranged with all the questions being given before the autumn break was really good. There was a lot of preparatory work, and it was time-consuming, but it was also really good reading, and one was "forced" to see each topic in a larger perspective and think about the connections. Personally, I feel that I have really learned the material and understand which approach one should use to solve a food technology problem rather than just being able to decode which formula one should use. The only downside is that it is quite time-consuming to prepare. But because the questions are handed out so early in the course, I think it's okay.
- We got, through the 10 tasks, tested learning objectives and from there we had free choice to decide how we best wanted to convey to the exam. So here they could see if we had understood learning objectives, by seeing what we had included in our presentation.

General comments for the exam:

- I thought the exam questions were quite difficult (and some very long) - and there are really many, so it took an insane amount of preparation time if you were to solve them all well - and in addition made presentable in PP. However, I think the tasks were really instructive and have made me learn most topics really well and think for myself - it's just always so unsatisfactory not to have time to finish properly. Have used much longer than the time one should on it in relation to the course's ECTS points. But again, if you have to go around all the course's learning goals then I understand it well.
- WAY too many exam questions, it took a LOT of time to prepare for the exam. Think I've spent 80+ hours on it, as you first have to understand the task, set up excel, do the task, possibly compare/talk to others, fix errors and make powerpoint. It's not very fun to do the last thing on the exam the night before you have to go up, because you have been too pressured. Suggestions for improvements: 1) Fewer number of exam questions (5-6). 2) Have answers, not procedure/formulas, but only answers to calculation tasks. Then you would more easily see when your calculation is correct and would save some time. 3) Have preparation for the exam, would be

nice just with 15 min. So you can “forget” the other tasks, and just get into the one you have drawn. 4) Possibly make it voluntary with Powerpoint, as you can also set up a nice excel sheet. 5)The exam tasks could possibly also be related to the assignments. So more theory comes in. Have set up excel sheet when you get the task (a bit like the assignments), as it also already took I thought the exam itself was nice. it was great to get “feedback” along the way about what you said fit reasonably and whether your results were correct. In addition, it was mega cool with assignments, they did a lot and were good “help” during exam reading. However, think about the length, as these also already took a lot of time to make. Often around 3-5 hours No matter what grade I get, I don’t feel it can match all the hours spent on the exam. A bit annoying that you don’t get a grade right away, and that you have to wait for it. Even though it was submitted Tuesday afternoon, it takes a little while before you get it. (especially annoying for those who are up Monday)

- Pros with this exam form: Super good, that you can argue for the considerations you have made during calculations and method etc so it is not just black and white. Cons: WAY too big a workload! I used about 7 hours of concentrated work for each task, without powerpoints etc. That is about 70 hours in total! Even though you get the questions already from the fall, it is WAY too ambitious compared to all our other courses. Rather make fewer questions MAX 5-6 pieces and maybe look more at the production line. And very much like preparation time after the question is drawn! (while another is inside)
- It’s a lot of work for an exam that takes 15 min and is only 5 ECTS points. 10 cases are a bit much to prepare for when you also have to make 10 powerpoints. Maybe turn down the number or build on the assignments we have already made, so you don’t spend as much time on calculations, so you have more time to understand what you are calculating.
- It would be nice to have 1-2 min preparation time, to look through your slides, as having 10 slides in your head is a bit complicated. Otherwise a good exam form. Examiner and censor were pleasant to be at the exam with.
- The only “criticism” I have is that it would be very good with just 2 min to just read your presentation before starting. Especially when there have been a lot of exam questions to keep track of. But where was the exam cozy, and the censor was super nice. An oral exam I actually think was good, where your teacher wished you the best.
- The exam platform is much better than last year, as you have more time to reflect on how you can calculate and what you should be able to. All 10 questions were really good at filling the curriculum
- Really good with reports throughout the course. This course has really improved a lot since last year.
- It might be a good idea that the new exam form could take place as follows: You come in and draw your task. You get 10 min you can read your task through. Then you come in to be examined. Everyone I talked to had the same feeling of not being able to remember all tasks just before the exam. It is important to remember that there are a total of 10 different tasks. All tasks have sub-questions, which would give about 95 tasks. It is impossible to know them by heart. It is a factor that makes me insecure. If you had the opportunity to spend a few minutes on the task before the exam, where you could read both the drawn task and your powerpoint, it would erase the stress factor of almost having 100 tasks you should be able to. Just a fair idea. This method is already used in many other subjects at DTU.
- In general, the 10 exam questions did not feel completely equal, in relation to what was expected. Where some dispositions had 6-10 sub-questions, where you thus due to time constraints have to jump quickly over certain calculations, some of the dispositions were 3-4 sub-questions and you had to instead go very in depth with calculations that other dispositions do not require. It can feel like a clearly harder task.
- After you have drawn it would be great with 5-15 min where you can just set things up and reread your slides, it felt very straight on and hard the way it was run this year.

- REQUIRED WAY TOO MUCH PREPARATION TIME. Have maybe used in the region of 50-60 hours only on exam preparation for this course. Where about 80% was just calculating the tasks. There was too much focus taken from understanding the course and instead it was about calculating tasks. Huge wish to minimize the amount of tasks that need to be calculated, or it is based on known assignment tasks or fewer possible tasks for extraction. Think it is underestimated how long it takes to calculate tasks in the course. More reporting and fewer new calculation tasks for another time. And huge wish that there came preparation time for the exam. It's way too overwhelming to have 10 cases, covering the entire curriculum, 100% clear when drawn, before presentation.
- Just add a short preparation time, then I would think it is a perfect exam for the course
- 10 questions are too much
- I really liked the exam form, as I felt that I was dressed really well for the exam. However, I spent far more than 100 hours reading up for the exam, which is far more than any other 5 point course I have had. It could be advantageous to build more on the homework and then draw one of them and present, in that way you still get the same exam form, but you don't have to sit with 10 full tasks and calculate. In addition, it could be nice with a sheet of numbers, so you knew if your calculations were completely out in the hemp.
- Again LOVE the course and what you learn. My problem was primarily communication, as I was not good at showing what I had in mind. By the fact that it is oral, I feel it was easier to explain one's mistakes and shortcomings in dialogue with the teacher. Fantastic course - am happy that I have passed the course, but sad that I will not have the curriculum and teacher anymore.

**Evaluations from 2024**

In the comments from the course the students wrote:

- Great course (I am very pleasantly surprised). There is a good mix of lectures and exercises. Big fan of the 6 mandatory assignments (the first one might need a bit more thorough explanation).
- It's really good to have exercises during the classes to put theory into practice. Additionally, it's been good to have different teachers to get the theory in different ways.
- Good points: 1)Exercises during the lecture work better than having them at the end of the lecture. 2) It's nice that the assignments are connected to what we learn during the lectures and the exercises we do.
- The course is still a bit heavy but manageable.
  The weakest part of the teaching is clearly 'teacher B's part where it's just info dumping with walls of slides that you end up tuning out. The teacher is nice and passionate about it. But for me, I didn't get anything out of it.

Comments on the exam, E1 cf. Table 1:

- It is indeed a large syllabus. However, the content of each assignment matched very well with the amount of teaching provided. For example, Gantt charts and processes were very detailed in weeks 1-2 and then crammed into weeks 12-13, but there was only one assignment on it. Plus, the exam questions were given out very early in the course, so it's one's own fault if they were stressed about them at the end... Although one might be limited in knowledge if we hadn't reached that point in the syllabus.
- All the assignments were recognizable in relation to the material we had covered.
- All the mentioned aspects were represented in the exam as well as in the teaching. The exam format consisted of preparing questions that we then had to present, as well as discussing the questions we had solved every other week.
- It was a great way to have an exam.

Comments on the exam, E2 cf. Table 1:

- None

General comments for the exam:

- The exam was tough but fair.
- It might be a bit much to do all the exam assignments and only be examined on one of them. Perhaps they could be done throughout the semester as a form of submission, and then one could be drawn for presentation at the exam with possible corrections.
- I thought it was a cool way to take the exam. However, it required a lot of time, but that applies to the entire course (an average of 9 hours per week is very low if you want to get the most out of it). I didn't mention this in the other evaluation, but I think it would be good if the course was, for example, 7.5 ECTS, but included in group work. Overall, a super cool course!
- If there was something to change about the exam, it would be to get the exam grade right after the exam and not the day after.