



## Food Chemistry and Food Physics LV0110, 10279.2021

15 Hp  
Pace of study = 100%  
Education cycle = Basic

### Evaluation report

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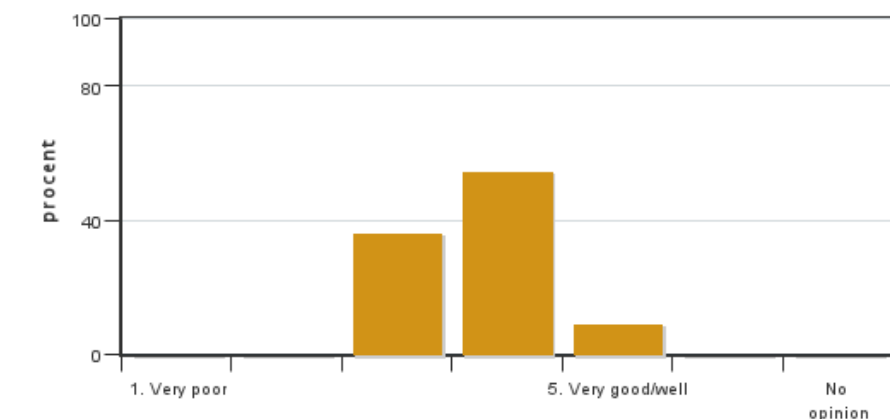
Evaluation period: 2020-10-25 - 2020-11-15

Answers 11  
Number of students 15  
Answer frequency 73 %

### Mandatory standard questions

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#### 1. My overall impression of the course is:

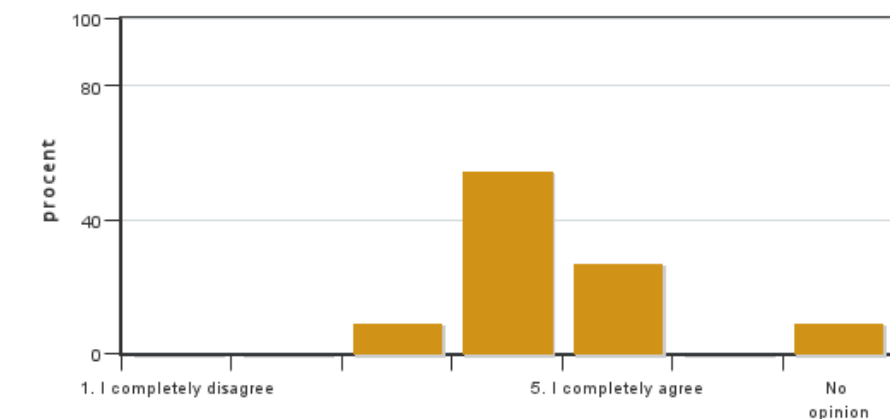


Answers: 11  
Medel: 3,7  
Median: 4

1: 0  
2: 0  
3: 4  
4: 6  
5: 1

No opinion: 0

#### 2. I found the course content to have clear links to the learning objectives of the course.

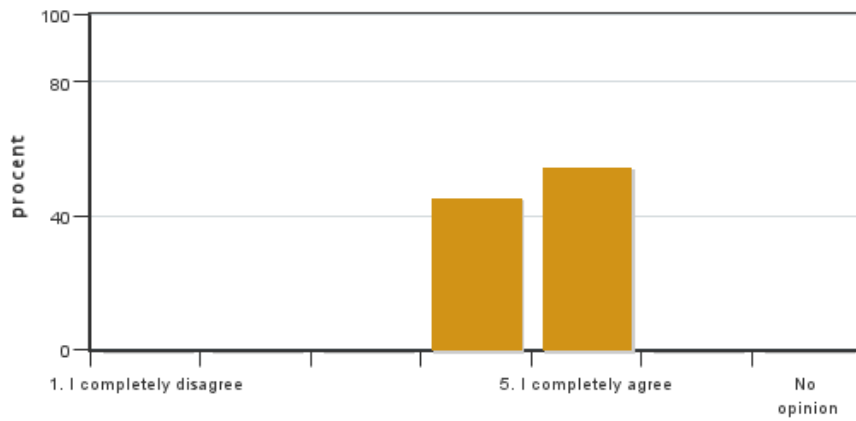


Answers: 11  
Medel: 4,2  
Median: 4

1: 0  
2: 0  
3: 1  
4: 6  
5: 3

No opinion: 1

#### 3. My prior knowledge was sufficient for me to benefit from the course.

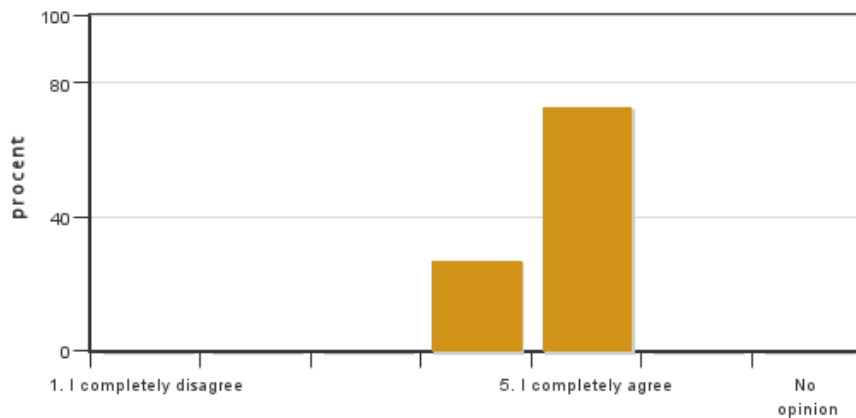


Answers: 11  
 Medel: 4,5  
 Median: 5

1: 0  
 2: 0  
 3: 0  
 4: 5  
 5: 6

No opinion: 0

**4. The information about the course was easily accessible.**

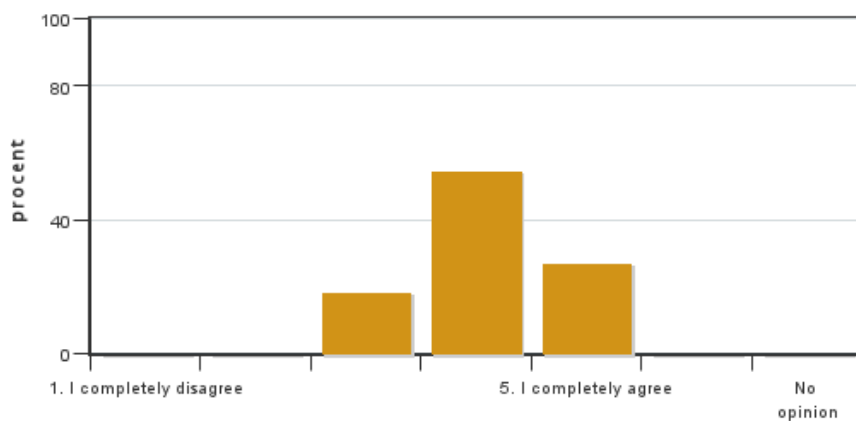


Answers: 11  
 Medel: 4,7  
 Median: 5

1: 0  
 2: 0  
 3: 0  
 4: 3  
 5: 8

No opinion: 0

**5. The various course components (lectures, course literature, exercises etc.) have supported my learning.**

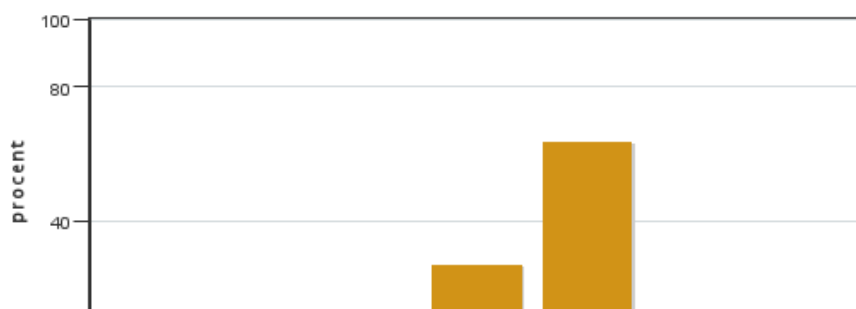


Answers: 11  
 Medel: 4,1  
 Median: 4

1: 0  
 2: 0  
 3: 2  
 4: 6  
 5: 3

No opinion: 0

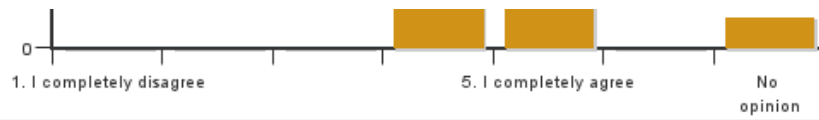
**6. The social learning environment has been inclusive, respecting differences of opinion.**



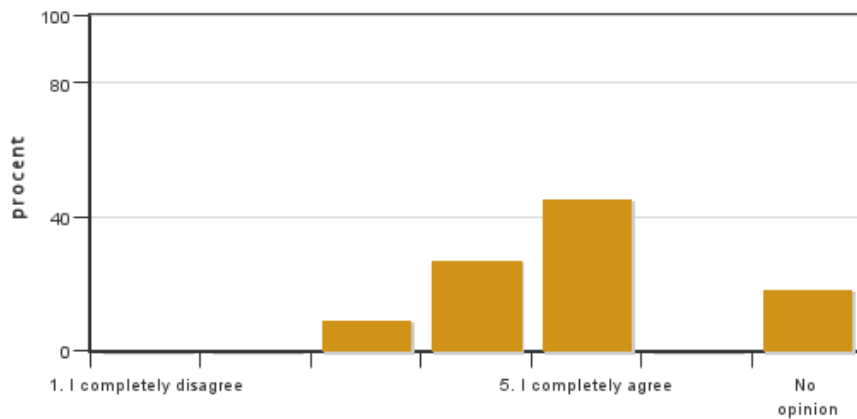
Answers: 11  
 Medel: 4,7  
 Median: 5

1: 0  
 2: 0  
 3: 0  
 4: 3  
 5: 7

No opinion: 1



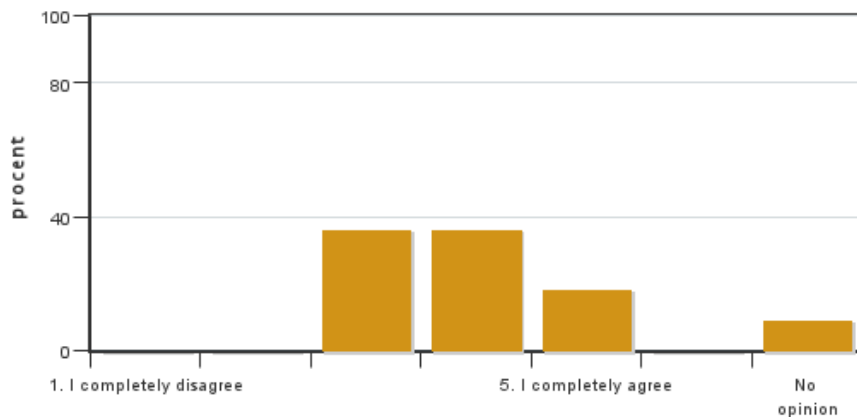
7. The physical learning environment (facilities, equipment etc.) has been satisfactory.



Answers: 11  
 Medel: 4,4  
 Median: 5

1: 0  
 2: 0  
 3: 1  
 4: 3  
 5: 5  
 No opinion: 2

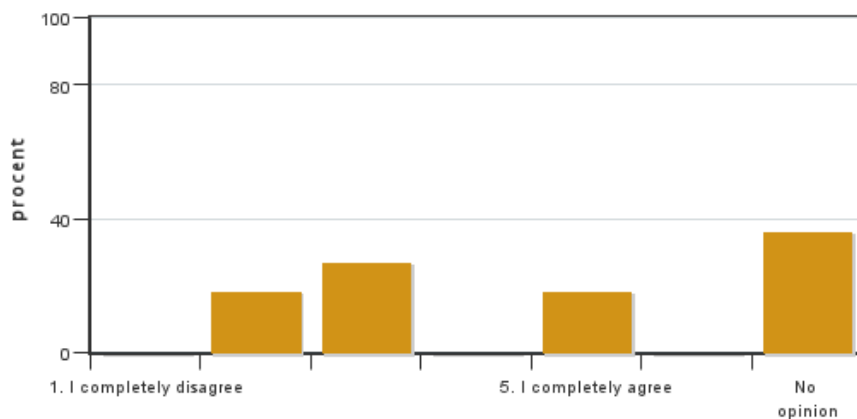
8. The examination(s) provided opportunity to demonstrate what I had learnt during the course (see the learning objectives).



Answers: 11  
 Medel: 3,8  
 Median: 4

1: 0  
 2: 0  
 3: 4  
 4: 4  
 5: 2  
 No opinion: 1

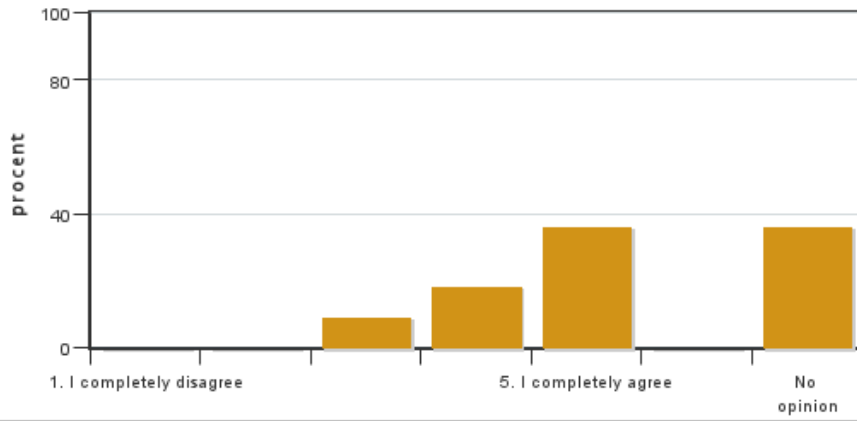
9. The course covered the sustainable development aspect (environmental, social and/or financial sustainability).



Answers: 11  
 Medel: 3,3  
 Median: 3

1: 0  
 2: 2  
 3: 3  
 4: 0  
 5: 2  
 No opinion: 4

10. I believe the course has included a gender and equality aspect, regarding content as well as teaching practices (e.g. perspective on the subject, reading list, allocation of speaking time and the use of master suppression techniques).

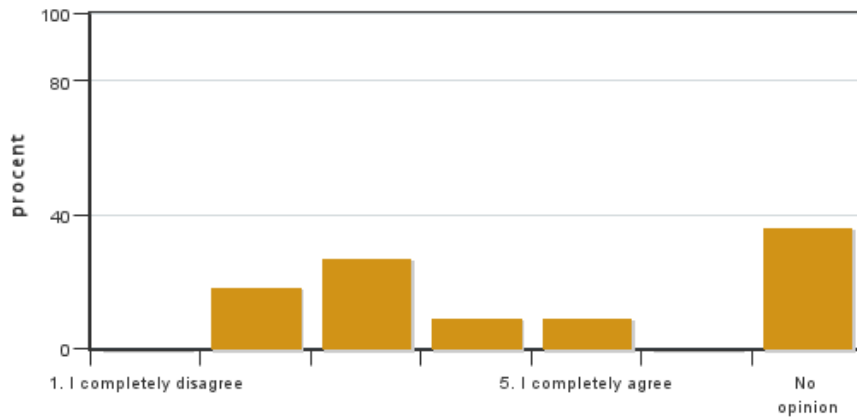


Answers: 11  
 Medel: 4,4  
 Median: 5

1: 0  
 2: 0  
 3: 1  
 4: 2  
 5: 4

No opinion: 4

**11. The course covered international perspectives.**

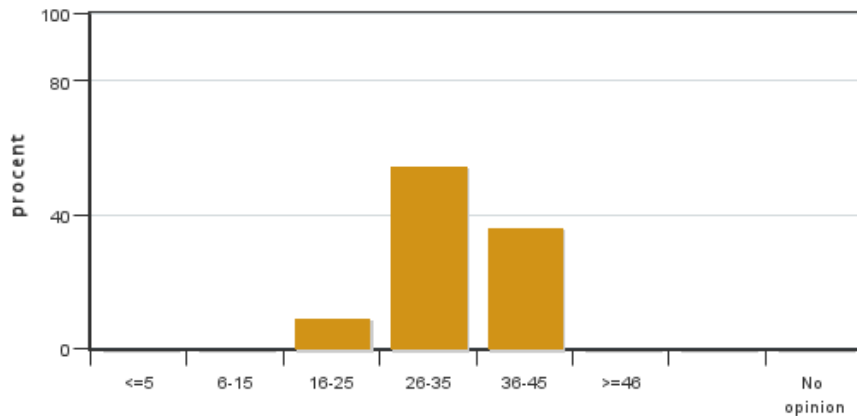


Answers: 11  
 Medel: 3,1  
 Median: 3

1: 0  
 2: 2  
 3: 3  
 4: 1  
 5: 1

No opinion: 4

**12. On average, I have spent ... hours/week on the course (including timetabled hours).**

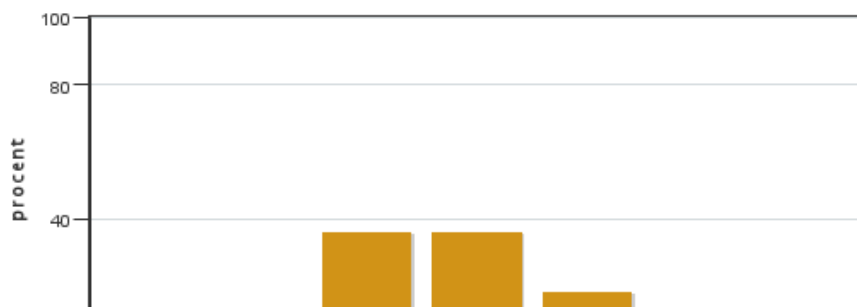


Answers: 11  
 Medel: 32,7  
 Median: 26-35

≤5: 0  
 6-15: 0  
 16-25: 1  
 26-35: 6  
 36-45: 4  
 ≥46: 0

No opinion: 0

**13. If relevant, what is your overall experience of participating in all or part of your course online?**



Answers: 11  
 Medel: 3,6  
 Median: 4

1: 0  
 2: 1  
 3: 4  
 4: 4  
 5: 2

No opinion: 0



14. If relevant, please share what worked well when participating in teaching on distance

15. If relevant, please share what worked less well when participating in teaching on distance

## Additional own questions

16. Was the content and quality of the lectures are appropriate (up to the expectation)? If not, mention what to change.

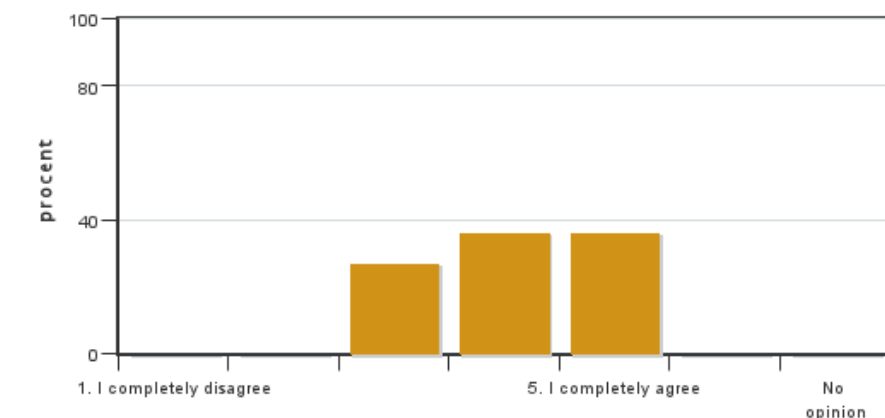
16. Was the chemistry lab (analysis of food dish) in the course planned to give you enough time to perform the tasks? Was the digital part of the lab helpfull and did it add to your learning? How could it be improved? Any other comments to this laboratory part?

16. Please share what worked well /not so well when participating in the starch gels (RVA) lab on distance and give any suggestions for conducting the lab online in a better way for future.

16. Please share what worked well /not so well when participating in the gel protein PBL on distance and give any suggestions for conducting the lab online in a better way for future?

16. Please share what worked well /not so well when participating in the digital emulsion lab and give any suggestions for conducting the lab online in a better way for future.

16. The course literature was relevant and has been a good support for my learning.



Answers: 11  
Medel: 4,1  
Median: 4

1: 0  
2: 0  
3: 3  
4: 4  
5: 4

No opinion: 0

17. Did the course leave out something that you had expected? If yes, please specify!

17. What was the best part of the course?

## Course leaders comments

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The response to this year's evaluation was 73% which is an increase in response compared to earlier years (56%, 2019 and 32%, 2018), which is very positive! It means students are really interested and it helps us to develop the course and we are really grateful for all comments.

In general, we got high grades. The overall impression of the course was 3.7 (median 4) which is a bit lower compared to last year but still 6 students answered 4 and 1 gave a 5 (out of 11 total). The content could be clearly linked to the learning objectives and prior knowledge was sufficient (4.2/4.5). Information was found to be easily accessible (4.7) and learning environment was good (4.7/ 4.4) despite the fact that we had some changes in the course due to Corona. The sustainability aspect was not covered so much (3.3) however it is maybe also not so much in the topic of a course that is mostly dealing with chemical and physical aspects of food.

Time spent on the course was between 26-35h per week similar as earlier.

Due to the ongoing pandemic of CoVid19 the course was adapted. All lectures were held on zoom, the food chemistry lab was half as a real lab and half based on pre-recorded videos and emulsion, starch gel and protein gel labs were transformed to distance/digital and PBL versions. In general students thought that zoom lectures worked well. Break out rooms for discussion were appreciated. Some students found it difficult to focus during the online lectures and asked for more structured handouts with a summary of the aim and what is important for the exam. Students also missed interaction with teachers and most of them had preferred the labs to be carried out on campus. The decision to not have an extra exam for students missing the exam due to having to stay at home was not so appreciated. We thought in the given context this was the best way, but this is a learning process also for us teachers and in case we still have a similar situation next year we will consider other ways.

In comparison with earlier years, we seemed to have managed to eliminate most of overlapping that was criticised in earlier evaluations and also the level of lectures was improved. Only the carbohydrates lecture was perceived to have still some repeating content from earlier courses. The new lecture on food toxicology was appreciated and will be kept in the course. There was a question about a lecture on water which was a bit confusing as the course contains a lecture on water. This was clarified in the student's summary and regards water analyses with maybe a focus on toxic substances. We will consider how to include this in a good way in the course in some way.

The topics rheology and texture are difficult for the students and distance teaching made it not easier. We also had a fluctuation of different teachers in the past years in the topic but hope to have reached a more stable situation which will make it easier to adapt and improve the lectures and consider changing/adapting the course literature. Possible ways might be to have an introduction lecture to general basic physics concepts and/or focus on selected important subtopics in rheology/texture.

The chemistry lab got quite good rating so our improvements there were successful, we will take the given comments in account for further improvements. As the texture and rheology labs got quite good grades last year, this year's problems seem to be mostly due to the change to distance and this will of course be taken in consideration in case we still need to teach in distance next year.

In general, the course has improved from last year showing a positive effect of our changes. The changes made due to the CoVid19 pandemic were in general rated good by the students but of course improvement can be done. Even if we hope next year's situation will be different, we will take what we learned from this experience in mind. We will of course continue to improve the course.

## Student representatives comments

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This course was mainly distance with the exam and some laboratory work on campus. Many students had difficulties concentrating on zoom lectures but it became easier to grasp the course content when the following are included;

- Clearly stating the aim of the lecture
- More explanatory text in Powerpoints
- Page references to literature
- Quizzes
- Study questions

This course provided all this in many of the lectures which was highly appreciated. Suggestions from students on minor changes to certain lectures have been given to the course leader.

Some areas that students have expressed the need for improvement in, are mostly about the parts about rheology and texture as they were difficult to understand and follow. The course literature did not contain much about these and hardly explained many of the terms we were expected to learn about. Many students did not understand the exercise about texture and it was hard to find information about it in the lecture, the textbook or online. Maybe this exercise is not necessary in the format that it is in now, since rheology and texture are discussed in the protein and starch lab.

As for the exam, some students felt that the exam questions could have been more widely distributed, for example if

you didn't know the difference between potato and wheat starch, you weren't able to show anything you knew about gelatinisation. Some students were surprised that the exam was very different from the two previous exams given as extra study material. They expressed that the types of questions, what they focused on, and the level of them differed. If future exams will be different in sense of structure, focus and level than the previous exams given, this should be mentioned.

If anyone had any cold symptoms they were advised to stay home. This was of course the case on the exam as well. But the students who had to skip the exam for this reason did not get an alternative like a home exam or an opportunity to do the exam one or two weeks after. They were referred to the re-examination date 5 weeks later. In this situation an alternative besides the re-examination date would have been optimal since there is a risk that the sick student will participate in the exam anyway because of the disadvantage of waiting 5 weeks well in the following course.

It would have been interesting and suitable for this Food Chemistry-course to talk about drinking water and tap water besides the chemical composition and bond in water and ice, especially together with the lecture on Toxicity. A lecture on drinking water could for example contain an overview in water purification and some of the problems with tap water today (in Sweden mostly, but with international examples as well), also mention possible pollutants and cocktail effects.

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Kontakta support: [support@slu.se](mailto:support@slu.se) - 018-67 6600